The energy crisis, specifically a shortage of natural gas, caused by the unusually cold winter of 1977, resulted in the Columbus, Ohio, schools being closed for a month. Schools heated with gas were closed, but students met one day a week in school buildings that used coal, oil, or electricity. The educational program continued with school personnel encouraged to use maximum creativity in making assignments and maintaining contacts with pupils. Special sections were published in the newspapers, and radio and television stations allocated time for educational programs. This report is a description of the responses to the school closing made by the education system and surrounding community. Methods used in the study included classroom observation; site observation; and a mail survey of a sample of students, parents, and teachers. (MLF)
A STUDY OF SCHOOL WITHOUT SCHOOLS:
THE COLUMBUS, OHIO PUBLIC SCHOOLS
DURING THE NATURAL GAS SHORTAGE,
WINTER, 1977

BEST COPY AVAILABLE

James R. Sanders
Daniel L. Stufflebeam

EVALUATION CENTER
COLLEGE OF EDUCATION
WESTERN MICHIGAN UNIVERSITY
KALAMAZOO, MICHIGAN 49008

December, 1977
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Western Michigan University
December, 1977

Acknowledgement and Disclaimer

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FOREWORD

The Columbus, Ohio Board of Education closed their schools effective at the end of the school day on Friday, February 4, 1977 until February 25, 1977. They also moved Spring Break from April 1977 to February 28-March 4, 1977. Schools were reopened on March 7, 1977. The energy crisis, specifically a shortage of natural gas, caused by the unusually cold Winter of 1977 had suddenly and severely disrupted the school system in that community and in many surrounding communities. This report is a description of the responses to the school closing made by the education system and surrounding community, including government and business/public service agencies not part of Columbus proper. Objectives of the study reported in this document included:

1. to describe the social, political, and educational context within which the alternative program was being offered; (see Chapter I)

2. to characterize and assess the design of the alternative educational system, with particular attention to the programming that was done in the areas of mathematics, natural science, and social studies; (see Chapter III)

3. To describe the extent that the design for the alternative program was being implemented, and, in particular, to describe how science education was being provided; (see Chapter III)
4. to identify effects on students, families, the Columbus School District, and the Columbus community; (see Chapter III)

5. to obtain judgments of the worth of the alternative education program from students, teachers, and parents; (see Chapter III); and

6. to ascertain the extent that districts outside of Columbus made use of the Columbus District's alternative education program. (see Chapter III)

This study was made possible through collaboration by several agencies. The Columbus Public Schools suggested that the study should be done, and the Evaluation Center at Western Michigan University agreed to attempt to organize and conduct the study. The latter organization contacted several funding agencies, and the National Science Foundation immediately funded the study by adding funds to an existing contract that they had with the Center for Instructional Research and Curriculum Evaluation at the University of Illinois. The University of Illinois then made a subcontract with Western Michigan University so that their Evaluation Center could conduct the study; and the Evaluation Center and the Columbus Public Schools subsequently cooperated in carrying out the study. Only the prompt actions of these organizations allowed this study to occur.

These hasty actions were justified, because educators needed greater insights into the capacities of school personnel to cope with crisis conditions and into the effects of emergencies on the quality of education, and because the Columbus situation presented an exceptional opportunity to gain these insights. This justification is borne out by the findings
that appear in this report. Numerous groups can learn much that has relevance to schooling under crisis conditions by studying this document.

Most notable among these groups are:

1. Columbus, Ohio. Public and Parochial School administrators, teachers, and school board members;
2. citizens of Columbus, Ohio;
3. the National Science Foundation;
4. other local, state, and national education agencies;
5. the national public;
6. the education research community; and
7. education policy makers.

There are many findings, issues, implications, and recommendations to be reported and carefully analyzed from this case study. This report contains a comprehensive compilation of information about the Columbus experience. It is arranged as follows:

Chapter I  Context of the Crisis
Chapter II  Description of the Study
Chapter III Findings reported by Investigatory Method
Chapter IV  Conclusions by Objective of the Study
Chapter V  Implications for the Future

Accompanying reports contain analyses of the content of this technical report. Copies of this report and accompanying reports are available at cost from:

The Evaluation Center
College of Education
Western Michigan University
Kalamazoo, MI 49008
CHAPTER I

CONTEXT OF THE CRISIS

The City

Columbus, Ohio is a Capitol City. It is located in the center of the state and in the drainage area of the Ohio River. It is located in an area of changeable weather. Air masses from central and northwest Canada frequently invade this region. Tropical gulf masses often reach central Ohio during the summer, and to a lesser extent in the fall and winter. There are also occasional weather changes brought about by cool outbreaks from the Hudson Bay region of Canada, especially during the spring months. Infrequently Columbus will receive showers or snow from the Atlantic. Columbus does not have a "wet" or "dry" season as such.

According to the Columbus area Chamber of Commerce, the population of the standard metropolitan area (1970 census) is 1,017,847. The city of Columbus itself has a population of 539,677. The white and nonwhite populations of the city are 81% and 19%, respectively. The area covered by the city is 173.9 square miles and the city has a tax rate (per $1,000 in 1976) of $40.40.

The city is served by the major state university and seven other colleges and universities within the surrounding county. In addition, there are four business and technical schools of higher education in the county. The city is served by a major airport and national bus and railroad facilities. In the surrounding county there are nine radio stations, four television stations, two daily metropolitan newspapers, and fifteen weekly neighborhood newspapers.
Columbus is a major center of cultural activity in central Ohio with five major theatres, nine community theatres, two ballet companies, professional sports, and public recreation. Fourteen musical organizations, four fine arts galleries, and two cultural arts centers are also found in this city. It is the second largest city in Ohio and twenty-first largest city in the United States. It is also the Ohio city with the largest gain in population from 1970 until 1974, and the only major city in Ohio showing an increase in population.

The average annual temperature in Columbus is 51.5 degrees with the monthly average of January being 28 degrees, and the monthly average of July being 74 degrees. Sources of energy in Columbus are the Columbia Gas Company as the gas supplier and Columbia Transmission as the gas distributor. There are 25 fuel oil distributors in the city and 10 coal sources. In addition, there are 13 LP gas distributors.

The type of government employed by the city is the mayor council system. Major employers in Columbus are, in order of size, the following:

<table>
<thead>
<tr>
<th>Name of Employer</th>
<th>Type of Product or Service</th>
<th>Number of Employees</th>
<th>Year Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>State of Ohio</td>
<td>Government</td>
<td>17,321</td>
<td>1803</td>
</tr>
<tr>
<td>Ohio State University</td>
<td>Education</td>
<td>16,164</td>
<td>1870</td>
</tr>
<tr>
<td>Federal Government</td>
<td>Government</td>
<td>12,452</td>
<td>1813</td>
</tr>
<tr>
<td>Columbus Public Schools</td>
<td>Education</td>
<td>7,636</td>
<td>1845</td>
</tr>
<tr>
<td>F &amp; R Lazarus Company</td>
<td>Retail</td>
<td>7,415</td>
<td>1851</td>
</tr>
<tr>
<td>City of Columbus</td>
<td>Government</td>
<td>6,839</td>
<td>1812</td>
</tr>
<tr>
<td>Western Electric Company</td>
<td>Telephone</td>
<td>6,380</td>
<td>1957</td>
</tr>
<tr>
<td>Ohio Bell Telephone</td>
<td>Utility</td>
<td>5,000</td>
<td>1921</td>
</tr>
<tr>
<td>Sears Roebuck and Company</td>
<td>Retail</td>
<td>4,571</td>
<td>1964</td>
</tr>
<tr>
<td>Fisher Body, Division of GMC</td>
<td>Auto Parts</td>
<td>4,074</td>
<td>1945</td>
</tr>
</tbody>
</table>

Considering the statistics summarized above, it is fair to say that Columbus is a growing, vibrant midwestern city with substantial...
resources that contribute to the cultural and educational well-being of this community. It has all of the resources required for continued growth and prosperity as a community.

The Columbus Public Schools

The Columbus Public Schools serve approximately 96,000 students in 177 school buildings. The district employs about 4,600 classroom teachers with 360 administrators and 320 professional support staff. The budget for the school year runs about $116,000,000 of which 67.5% is spent for instruction, 11.25% for plant operation, and 12.25% for fixed charges. The amount of money going to salaries and fringe benefits totals 87.1% of the total expenditures for the district.

The Columbus Board of Education consists of seven members, each elected on a non-partisan ballot by the people for terms of four years. The Board is the policy-making body for the Columbus Public Schools.

The Columbus Public Schools has had a history of close community relations evidenced by participation of school district administrators in community service organizations such as Kiwanis, frequent meetings between school administrators and city and state government officials, periodic and frequent media presentations by school personnel over television and radio, and central administration staff assigned specifically to communicate district information to parents, legislators, government and business leaders, the media, and representatives of community special interest groups. The School Board has had a good relationship with the superintendent and central administration, supporting them at almost every turn.
However, the Columbus Public Schools did experience some difficulties during the 1976-77 school year. In November, 1976, a levy failed and the levy was to have been brought up again in June, 1977. Furthermore, the school district was involved in a desegregation suit brought about by the Columbus chapter of the NAACP. The racial makeup of the schools is approximately 67% white and 33% non-white, and although no noticeable civil disturbances existed, the Black community was concerned that the distribution of students to buildings within the district had historically segregated Black students. It is worth noting that the makeup of the School Board was four whites and three Blacks. Several votes, especially those relevant to the desegregation issue, followed racial lines.

The Crisis and Its History

As far back as the summer of 1976, the Columbus Public Schools were offered supplemental natural gas supplies for the coming winter. At that time the Columbia Gas Company offered to obtain and supply natural gas at a cost substantially higher than the normal rate to supplement the normal allocation of gas to the school system. The supplemental allocation would have to be used first before the normal allocation could be used by the system. Since heating trends had been fairly stable in the past and the school system estimated that its normal supply of natural gas would be sufficient for the coming year, they declined this offer by the Columbia Gas Company. By January, 1977, it began to become evident to the school system and to the gas company that the normal allocation of gas to the Columbus Public Schools would be insufficient unless the cold weather were to
break. It did not, and by the last week in January decisions about continuing public education in Columbus had to be made. According to school superintendent John Ellis he first realized the school system had to do something about one month prior to the date when the decision to shut down the Columbus Public Schools arrived. As time progressed through the month of January, ideas about how to continue public education during a natural gas shortage were discussed. Alternative ideas included shutting down the schools completely and extending the school year into the summer, half-day schools, and continuing education outside of regular structured classrooms. Eventually the third alternative was selected and a project called School Without Schools was created under extremely uncertain conditions. During the latter days in January, estimates of gas availability, allowable actions, and schedule changes changed almost daily.

The uncertainty of the situation was reflected in the following memorandum issued by Superintendent Ellis to school staff on January 27, 1977:

"I know you are concerned about when you will have definite information about closing school. We have been "up to our eyeballs" in emergencies, meetings, etc., trying to find gas, getting legislative relief, and developing ways to keep education on track. This memo -- tentative though it is -- should provide insight into the possibilities. Please share it with your entire staff.

A special meeting of the Board of Education is planned for Friday, January 28, 4:00 p.m. at the Columbus Education Center. It will be broadcast on WCBE. It is essential that administrators listen to this meeting. Staff members are also encouraged to listen because we intend to cover important information on the energy crisis, and the Board may take official action to close on a specified date.

As of this writing anything is possible, including no closing. It is frustrating, I know, not to have definite information, but let me give you my best guesses at this time. The following events are likely:
1. Schools will probably be closed for approximately one month, possibly as early as Wednesday, February 2.

2. The legislature will probably ease the attendance laws so we can get credit for some or all of the days missed.

3. The Mayor and other city officials will be highly cooperative by making available city personnel and city facilities for education.

4. School personnel will be paid for the time schools are closed because they will work.

5. Buildings using coal, oil or electricity will be kept open for system-wide activities that have yet to be developed. The other buildings will be closed with minimum heat to keep pipes from freezing.

6. Newspapers, radio stations, and TV stations will cooperate extensively by broadcasting lessons, assignments, tests, etc.

7. School personnel will be encouraged to use maximum creativity in making assignments and maintaining contacts with pupils via small groups or large groups in homes, recreation centers, schools that are open, etc., and through telephones or correspondence. Television and radio lessons should be considered an essential part of the process.

8. The April vacation would be cancelled for students, but school personnel would have equivalent vacation during the period we are closed for emergency. This vacation may be designated for a specific time for virtually everyone or it could occur at varying times depending on the needs of the system and preferences of individuals. This, of course, must be negotiated with CEA.

9. A high level of trust and creativity will have to prevail so that the informal nature of the schedules will produce responsible reactions. We don't want a lot of hassle, or punching time clocks, or filling out endless forms.

10. We will have a tremendous opportunity to demonstrate what educators can do in concert with the total community to meet an emergency in a positive way.

The items I have mentioned are subject to considerable alteration and may not occur. Nevertheless, I want you to have this information so you can think ahead to the good things that can happen if we are forced to close. We are facing emergency conditions, and time is very short. Teachers are already thinking about what essential lessons can be assigned in advance and what books and materials they will need to take with them. This is good and should be continued.
We want to observe all conditions of the contracts, and are communicating constantly with CEA, OAPSE, and CAA. There is general recognition on the part of all organizations that emergency conditions exist, and we are going to have to respond in an exemplary fashion.

To summarize, the staff can plan on working during the emergency period we are closed except for the vacation period that is specified. It will be different, but it can be a real adventure in education. Ingenuity, creativity, and cooperation will be the passwords. I know we have a quality staff, quality students, and a quality community. We can do it.

On February 1, 1977, the Board of Education issued the following resolution:

WHEREAS, Governor James A. Rhodes on January 27, 1977, declared a statewide natural gas crisis under powers granted in Section 122.87 of the Ohio Revised Code; and

WHEREAS, Mayor Tom Moody promptly issued a similar declaration applicable to the city of Columbus; and

WHEREAS, the President Pro Tempore of the Ohio Senate and the Speaker of the Ohio House of Representatives on January 28, 1977, issued a statement proposing "to authorize, through temporary legislation, an additional 15 days to the schedule of closures for response to energy shortages"; and

WHEREAS, the Columbus Public Schools have conducted an exemplary program to conserve natural gas only to be faced with rapidly escalating curtailments applied by Columbia Gas of Ohio, Inc.; and

WHEREAS, said curtailments of Columbia Gas have reached the prohibitive level of 85% for 45 Board-owned facilities, a level tantamount to the unilateral closing of schools by Columbia Gas; and

WHEREAS, the school system has explored every conceivable avenue for relief from the curtailment levels imposed by Columbia Gas; and

WHEREAS, realistic calculations indicate that the supply of natural gas allocated to the Columbus Public Schools will be exhausted on or about February 17, 1977; and

WHEREAS, prudence dictates that the school system's rapidly dwindling supply of natural gas be used so as to prevent costly structural damages or other harmful effects to school facilities;

NOW, THEREFORE, BE IT RESOLVED: That the Columbus Board of Education recognize the existence of a crisis of such proportions that the only reasonable course of action available to the Board is to cause all schools to be closed effective at the end of the school day on Friday, February 4, 1977.
BE IT FURTHER RESOLVED: That the school administration be authorized and directed to employ such measures as are required to protect and secure all Board-owned facilities serviced by natural gas.

BE IT FURTHER RESOLVED: That the school administration plan with the school staff for the most effective educational utilization, from February 7 through February 25, 1977, inclusive, of all other Board-owned facilities and such community facilities as are offered voluntarily and without charge to the Board, provided that each such community facility is determined by a member of the administrative staff to meet reasonable standards of safety and fitness for the educational purpose intended, and is included on a list of approved facilities compiled by the Superintendent of Schools, which list shall include all publicly-owned facilities made available to the Board by the Mayor of Columbus.

BE IT FURTHER RESOLVED: That the Board express its support for the "School Without Schools" project, which shall be conducted between February 7 and February 25, 1977, and which shall feature imaginative scheduling of pupils into schools serviced by alternative sources of energy, television and radio lessons on commercial stations as well as WCBE, newspaper education activities, instructional activities in a variety of municipal facilities made available to the Board by the Mayor of Columbus, and a wide range of creative learning experiences in private facilities donated to the Board.

BE IT FURTHER RESOLVED: That the Board request parents and pupils to cooperate with all segments of the school staff and the community in helping the "School Without Schools" project realize its fullest potential.

BE IT FURTHER RESOLVED: That the Board express special thanks to all community organizations, institutions, and media which have already offered to contribute materially to the implementation of the "School Without Schools" project; and specifically request that the administration maintain a complete log of all such contributions during the course of said project so that the contributions of the community may be spread upon the minutes of the Board and duly recognized.

BE IT FURTHER RESOLVED: That the Board approve the attached "Memorandum of Agreement" with the Columbus Education Association, containing provisions relating to "Calendar Changes" and "Emergency Guidelines," and authorize and direct the President of the Board and the Superintendent of Schools to affix their signatures to said "Memorandum of Agreement."

BE IT FURTHER RESOLVED: That holidays previously scheduled for classified employees and educational aides during the week of April 11, 1977, shall occur during the week of February 28, 1977.

BE IT FURTHER RESOLVED: That classified employees and educational aides who elect an unpaid status during this period shall be considered to be on a Board-approved leave of absence.
**BE IT FURTHER RESOLVED:** That all use of building contracts for all Columbus Public School buildings by outside organizations be suspended for the duration of the emergency, effective at the close of business on Friday, February 4, 1977.

**BE IT FURTHER RESOLVED:** That all schools be reopened on Monday, March 7, 1977.

Around the January 27 date (over a one week period) the superintendent met with the Board of Education and received encouragement from the Board. He also met with Mr. Gene DiAngelo of a commercial television station who offered the Columbus Public Schools free television time every weekday morning from 7:30 until 11:30 to provide instruction. The superintendent also met with the mayor who offered the city's services in the event the schools were shut down. He met with the executive director of the Columbus Education Association and explained that he could not do innovative things without their support due to contract restrictions. The superintendent outlined the general plan for School Without Schools and asked for the union's opinion. The union executive director supported the plan, met with building representatives, and agreed to contract changes that would allow School Without Schools to be implemented.

According to Superintendent Ellis, the major breakthrough in allowing instruction to be restructured were the offer of television time by Mr. DiAngelo, support of the OEA, and offers of support by the city's mayor. The leadership of Father Sorahan, Superintendent of the Catholic Diocese was another vital element. In fact, his contingency plan, in the event of a gas shutdown, for cycling the Diocese students through their buildings that were not on natural gas provided a kind of prototype plan for the public schools' School Without Schools Program. The public demonstration of cooperation
and strong leadership started a ripple effect within the community, and soon many offers of support were being received. Dr. Ellis and Dr. Sorahan both noted that their second line administration provided them with the support they needed in order to implement a crash program. Finally, legislative action which extended the number of snow days (or crisis days) allowable to an Ohio school district by 15 additional days provided the legal basis for implementing School Without Schools.

The CEA Memorandum of Agreement dated February 2, 1977, that was appended to the Columbus Public Schools February 1 resolution, was a vital factor that allowed the School Without Schools Program to be conducted.

MEMORANDUM OF AGREEMENT

The Columbus Board of Education and the Columbus Education Association hereby agree to the following school calendar changes and to the guidelines set forth herein relative to the emergency closing of most Columbus Public School buildings as a result of the natural gas shortage currently being experienced by the Columbus Public Schools:

Calendar Changes

1. The Professional Meeting day previously scheduled for February 21, 1977 shall be eliminated. An Emergency Planning day shall be observed Wednesday, February 2, 1977 as a day for teachers to plan with their building administrators for activities to take place during the emergency closing. At least half of said Emergency Planning day shall be reserved for individual preparations by teachers.

2. The spring break days previously scheduled for April 11 through 15, 1977 shall be observed as a winter break to be scheduled February 28 through March 4, 1977.

Emergency Guidelines

1. The Columbus Board of Education and the teachers at the Columbus Public Schools, represented by the Columbus Education Association,
shall endeavor, during the period of emergency closing to provide the best possible education for pupils of the school system under the emergency conditions by utilizing available community facilities and resources in addition to available school system facilities and resources.

2. During the period of emergency closing teachers shall be assigned duties or shall undertake duties usually associated with the teaching profession and shall be assigned duties of a "make work" nature, extensive clerical duties, or assignments not usually associated with the teaching profession.

3. Participation in the programs designed for presentation in the media shall be on a voluntary basis.

4. Participation in activities beyond the normal work day of teachers shall be on a voluntary basis.

5. Teachers shall have no less than the normal preparation, planning, and lunch periods provided during the regular school year, on a weekly average.

6. A joint Conflict Resolution Committee, composed of four members, shall be established to expedite the resolution of problems related to the emergency closing or programs and activities arising therefrom. The committee shall report at least weekly to the Superintendent and the President of the Columbus Education Association and shall operate under the rules for joint committees set forth in Article 508 of the CEA-Board Master Agreement.

(2/2/77)

Origination of the Study

The present study was initiated by Dr. Howard Merriman, Assistant Superintendent for Instruction, in the Columbus Public Schools. He noted that during the last week in January all resources in the Columbus metropolitan area were being directed toward restructuring the Columbus Public Schools program to allow education to continue without the use of school buildings. He felt that it was important to capture this event, not only for future use of the Columbus Public Schools, but also for the use of school districts throughout the country which at some time will be faced with crises similar to this.
Dr. Merriman contacted Dr. Daniel Stufflebeam, Director of the Evaluation Center at Western Michigan University to request assistance in documenting the School Without Schools program, and Stufflebeam in collaboration with Dr. James Sanders, Associate Director of the Evaluation Center, responded by seeking support from several federal agencies for such a study. The National Science Foundation was able to respond immediately to such a request and provided the monetary support for the study. The Evaluation Center was able to provide immediate assistance via staff reallocation and the support of Western Michigan University administration needed to undertake the study. A copy of the study proposal is appended to this report.

Scope of the Study

This report contains a great deal of information about the School Without Schools Program. How the program got started, how it operated, and what its effects were, have been studied from many perspectives and through the use of many techniques.

The perspectives included those of students; teachers; administrators; parents; school board members; community members; state and local government officials; commissioned experts; business and industry leaders; gas company officials; minority group and union representatives; TV, radio, and newspaper personnel; other researchers studying "School Without Schools"; and educators in surrounding communities.

Whenever possible, several different methods were used to investigate each study question, hypothesis, and tentative conclusion. Methods employed were observation, hearings, interviews, document
retrieval, questionnaires, and telephone surveys. Results of the school testing program and of television rating studies were also obtained. Finally, in compiling this report, the co-investigators tried to describe and assess School Without Schools as completely as the study data permitted.

Limitations of the Study

There are, however, several limitations of the study that must be borne in mind. These are as follows:

1. Only a sample of the people, places, and events that constituted School Without Schools was studied, and there is no guarantee that this sample is representative of School Without Schools.

2. School Without Schools officially was a program of the Columbus Public Schools, but actually it was a total community effort. This study concentrated on the public school district's portion of the program and does not adequately reflect the role of the Catholic Diocese and other agencies that were involved.

3. The non-experimental nature of the study as well as the impossibility of appropriate testing of students makes it impossible to establish cause and effect relationships between School Without Schools and students' learning.

4. Finally, no generalizations are possible concerning how "School Without Schools" would work elsewhere or even in Columbus during another year under different social, political, economic, energy, and climatic conditions.
The message of the limitations is that the reader should exercise caution in interpreting and applying the contents of this report. However, we urge that the study be used as one -- but certainly not the only -- source of information for planning how to conduct education under emergency conditions. We also think this report is a rich source of hypotheses and questions that can guide further research in the area of educating under crisis conditions.
CHAPTER II

DESCRIPTION OF THE STUDY

The Evaluation Center at Western Michigan University was first contacted on February 5, 197- when Dr. Howard Herriman, Assistant Superintendent for Curriculum and Instruction in the Columbus Public Schools contacted Daniel Stufflebeam, and invited him to study and document the school system's response to the energy crisis. The National Science Foundation was first contacted by the co-directors of the project on February 10. Verbal approval to proceed through a subcontract arrangement with the University of Illinois, was given by NSF the evening of February 11. The instant response by the funding agency, the cooperation of Dr. Robert Stake of the University of Illinois, the ability of the project co-directors to move into the Columbus Study with little advance warning, and the full cooperation of the public and private school districts and of many other groups (too numerous to name) in Columbus were critical factors in conducting this case study. The plan for the study was generally outlined in the February 11 proposal to NSF and is provided in Appendix A.

Upon verbal approval of the project and commitment of funds by NSF, the co-directors immediately prepared to move on site. Prior arrangements made at the Evaluation Center included general planning for initial activities, gathering materials, and tape recorders that might be useful on site, clearing calendars, cancelling or rescheduling other commitments, arranging for expenditures in the upcoming contract, and turning administration of the Evaluation Center over to Associate Director Dr. Mary Anne Bunda.
The co-directors arrived in Columbus on February 15, met with school system contacts, established offices and began structured used to create a list of potential team members for the two teams planned for the study, to contact those people, and to arrange for orientation meetings. The two teams were: (1) a classroom observation team, designated as the eyes and ears of the co-directors in elementary and secondary classrooms and school buildings and (2) a site visitation team of specialists in school administration, science education, community education, finance, and school law who would observe and report on the program experience outside the classroom. Lists of team members are included with the project personnel list in Appendix C. Preliminary instructions given to each team can be found in Appendix D. The co-directors also enlisted two project research assistants from the graduate student population at Ohio State University and the assistance of two evaluation staff members of the school district and clerical support from that evaluation unit. All staff members were given assignments to cover most of the project during this initial week. Other contacts made the first week were with the Columbus Education Association and Ohio State University researchers conducting studies of the program. Additionally, a solicitation of information about the program was made through the Columbus newspaper (see Appendix E) and arrangements for observation team visits were made with building principals and classroom teachers. Thus, first week activities of the project were spent on organizing, structuring, and arranging for data collection activities to follow.
The second week of the project was the last week of operation for the School Without Schools program. The site visitation team worked throughout the week collecting information from a wide variety of sources. The observation team spent 2-3 days each in assigned classrooms and school buildings following a Monday evening orientation meeting. The co-directors continued interviews, collecting relevant documents and administering data collection activities. Hearings with science teachers and teachers on radio and television were held late afternoons during this week in facilities provided by the Columbus Education Association. Finally, a memorandum was sent to all school personnel requesting copies of any materials they might have collected or produced that documented the School Without Schools program. This data collection activity proved to be productive and enlightening. The data provided by school staff greatly enriched those collected by personnel on this project. The second week of the project was primarily one of data collection.

The third week of the project was one of retrenchment for project staff. This was Spring Break for the Columbus Public Schools and hence, no site activities were planned. Revisions in the research plan were made based on information already collected and arrangements were made for upcoming data collection. Observation team revisits for the week of March 14 were planned and arranged and telephone interviews of surrounding school districts were begun.

During the following week, the Columbus Public Schools reopened on a normal schedule and the co-directors were on hand to experience it. Interviews were also conducted during this period.
with commercial television station staff, a legislator, curricular specialists in the Columbus Public Schools involved with the School Without Schools program, personnel of the Columbus Dioceses, and more central office administrative staff.

The fifth week of the project, the second week of normal classes, found the observation team revisiting the same classrooms they saw under School Without Schools conditions. A second report was written by each team member and submitted shortly thereafter. Each team member spent 2-3 days using the itinerary found in Appendix D. The coordinators obtained a videotape documentary, from a teacher's perspective of the School Without Schools program at this time also. The videotape was produced by WOSU-TV, the local public broadcasting station.

The remainder of the data collection efforts of the project consisted of a mail survey, a meeting with Ohio State Department of Education personnel to gain permission for the survey, a site visit by NSF, a hearing with the Columbus PTA Council, and receipt of data from an Ohio State University survey study of the School Without Schools program. Reports from each site visitation team member were also received and are included in Chapter III of this document. Two reports were received from each observation team member (one for observations made during the program and one for observations made two weeks after regular programs resumed). These reports are also provided in Chapter III.

The mail survey was conducted to provide a representative sample of students, parents, and teachers an opportunity to report their experience in the School Without Schools program. Data
collection had been focused on selected observations, interviews, document analyses, review of solicited materials, and solicited reactions to the program from various audiences, hearings, and analysis of existing data (e.g., ARBITRON and Nielsen television ratings, Ohio State University survey data). The mail survey served to confirm, or disconfirm, many hypotheses that were formed earlier. Results of the mail survey are provided in Chapter III of this report. Copies of the survey instruments, cover letters, and follow-up letters may be found in Appendix F. The survey form was sent during the first week in April 1977 to independent random samples of 200 students (grades 7-12), 200 parents, and 200 teachers selected from computer files kept by the Columbus Public Schools. The response rate for each group, following one follow-up letter sent the first week in May, 1977, was as follows:

- 116 students (58%)
- 79 parents (39.5%)
- 146 teachers (73%)

Using the responses from each group reported in Chapter III, the distributions of respondents on such variables as age, grade level, and number of children caused no alarm over response bias in these data. However, the survey results were used only to supplement other sources of data in arriving at conclusions and not as a primary source of information for this report.

The final stage of the study involved the careful review and consideration of all sources of information by the co-authors of this report in order to arrive at a defensible set of conclusions and recommendations. The analysis method involved personal theory
generation and hypothesis testing where impressionistic, tentative conclusions were put forth and then confirmed or disconfirmed by available evidence and the experience of the co-investigators. Only those conclusions that could withstand rigorous debate and confirmation were allowed to remain. Conclusions resulting from this analysis are discussed in Chapter IV of this report. Implications of the findings from this study are discussed in Chapter V.

In summary, the methods used in the study may be outlined as follows:

1. Preliminary planning and project organization.
2. Initial interviewing and document collection.
3. Classroom observation (teams used).
4. Site observation and data gathering (teams used).
5. Solicitation of voluntary information and relevant materials.
6. Snowball sampling for further interviewing and information gathering.
7. Hearings.
9. Mail survey to collect retrospective information.
10. Development of conclusions and discussion of implications.
CHAPTER III
FINDINGS
REPORTED BY INVESTIGATORY METHODS

A. Classroom and School Building Observation

A team of professionals in elementary and secondary science education was formed during the first week of the study. They were scheduled to observe classes and school building operations during the School Without Schools Program and again after the regular program was reinstated. Their role in the study was to serve as the eyes and ears of the principal investigators in the public schools of Columbus. Preliminary instructions given to the team and their itineraries are provided in Appendix D, but all were encouraged to use whatever observation methods they had found to be successful in the past in recording events of interest. The assignments of the observation team were as follows:

Terry Denny (elementary education professor, University of Illinois)--elementary and secondary classrooms, social studies

Barbara Grandon (elementary teacher, Scioto Downs, Ohio School District)--elementary classrooms, elementary science

Marilyn Suydam (mathematics education, Ohio State University)--secondary classrooms, mathematics. Dr. Suydam's report was supplemented by reports from Dr. Joe Crosswhite (mathematics and science education, Ohio State University) and several graduate students

Arthur White (science education, Ohio State University)--secondary classrooms, science

Miriam Brierly and Margaret Wehner (evaluation specialists, Columbus, Ohio Public Schools)--elementary and secondary classrooms

Dr. Denny reported informally to the co-directors and his findings were used by the co-directors in developing this report. The other team members submitted formal reports and these are presented in complete form in the following pages.
FIRST OBSERVATIONS
School Without Schools Program
Elementary Science Education
by
Barbara Grandon

During this energy crisis period, three of the four schools I visited were meeting in traditional school buildings while one school on its one day in school session was meeting in a site very different from its home building. McGuffey Elementary School, a traditional school with self-contained classrooms, had as its School Without Schools site, an open space school.

A teacher at the first school visited told me that each school in the Columbus School System could design their own program for meeting with children on the days their school was not in session. I found some teachers were meeting with their students only one day a week and others were meeting with their entire class or small group in homes, churches, or libraries.

In one school, the principal stated that her teachers worked as a team calling and making arrangements for teaching sites outside the school. Most of the children in this school met for half a day two to four times a week in addition to their day in school. These teachers seemed to have more contacts with their students than did the teachers interviewed at the other schools who had had to make their individual arrangements for teaching children in other places. The number of times a teacher met with her students or the size of the group she taught varied from teacher to teacher.

Only one teacher gave a reason for not meeting outside school with her students. She said they were not motivated to learn and would not attend.

The chart below shows how those teachers observed or interviewed scheduled their meetings with students.
In addition to meeting with the children one or more times each week, teachers gave children assignments to complete at home. According to one teacher, the first week assignments were optional but as the program went into its second week the teachers were told to collect assignments and grade them. A first grade teacher reported that she gave assignments only to those children who could read. Two other teachers said they gave fewer assignments the second week than the first as their children complained about the amount of work they had to do.

Many of the assignments given children were to review subject material in the classroom. About ten teachers stated that their assignments were to review lessons. Some teachers assigned new material in history, science or social studies. The assignments in these subjects were to read a chapter and answer the questions at the end of the chapter. Some enrichment assignments were given to children but I did not find out what these were.

There was as much variation in the scheduling of field trips as there was in the setting of classes out of school. Some teachers scheduled field trips and others did not. Trips were taken for a variety of reasons—to supplement a social studies or science lesson.
taught before school closed, to extend science concepts, to enrich children's experiences, and to serve as motivation for discussion when school resumes.

One sixth grade teacher with a predominately black class did not meet with her children for instruction outside school but she did take small groups of students to the Center of Science and Industry, the Ohio State School for the Blind, the Black Cultural Center, the Lincoln LeVeque Tower, and T.G.I. Fridays, a very mod restaurant in Columbus, for enrichment experiences.

The staff at one school planned an all day trip for all the students to the Columbus Zoo on the last day of the "School Without Schools," and two other teachers planned bowling and gymnastic trips for enrichment, also.

Teachers at the traditional school sites commented that the children had seemed to adapt quickly to the new school and that attendance had been good. Several teachers said attendance was better on the one day in session than on regular school days. One teacher felt this was due to children's curiosity and the parent's desire to have the children take advantage of their only day in school each week.

Some children were reported to have not attended at all, even when parents were contacted and urged to send them to school. Teachers also said attendance dropped at out of school sessions and on field trips.

Subject areas being emphasized were reading, spelling, and math. Teachers said they had been requested to concentrate on these basic skill areas. One principal was quite emphatic in telling me that I would not see science or social studies being
taught in his school.

Some history and social studies were being taught but little science. Other than science related field trips, only two teachers planned science lessons for their classes. One teacher took her class to her home to learn how to care for and feed horses. The other teacher related that she had had the children play a science game patterned after a Columbus television program called "In the Know" in which students from two schools compete by demonstrating their knowledge of various topics. This teacher's questions for her "In the Know" game were based on her "out of school" science assignments.

Only one teacher that I talked to tried to correlate the television programs with her classroom teaching. Others suggested programs that the children might watch for enrichment. Several teachers said they felt the programs on radio were better than those prepared by teachers for television and had asked students to listen to these.

In the different classrooms children were involved in the following activities: solving math problems independently, checking math problems or assignments with teacher, listening to a math demonstration, writing numbers in sequence on the chalkboard, working on spelling papers, writing answers to questions related to reading or social studies and playing math games.

Children's interest was high only in the classrooms where games were played. In classrooms where students were meeting with their teacher more than once a week, children worked quietly and were attentive when the teacher spoke. In those classrooms where children had contact with their teacher once a week, interest
as low and the children were restless.

The teacher's role in the classroom as I perceived it was more that of a facilitator than teacher as he or she had children complete assignments or gave individual help as needed. Teachers stated that they were giving much more individual help now.

The teaching techniques I observed being used were discussion, demonstration, and reading. When asked if they had tried any different teaching methods, one teacher replied that she had not tried any different methods as this would tend to confuse the children. Another teacher said she didn't change her methods but she brought new material to the new school to stimulate children's interest.

There was a little concern about my presence in two of the schools. One teacher in the open space school came over to me and asked why I was there. He said the teachers in his building wanted observers screened. After I informed him about the purpose of my visit, he invited me to visit his class as he was having a science lesson. After observing this lesson, I felt the lesson had been contrived just for me. Children were bored and very fidgety. The teacher had difficulty getting children to answer questions about a chapter in a science book. I must add that this was the only science lesson I saw.

In another building the principal conducted me to the two classrooms he selected for me to visit. In one room the teacher was teaching reading and I did not get to talk to her at all until the children had been dismissed from school. In the other classroom, the teacher stopped whatever activity she was having and asked if I wanted the children to show me some math games.
they had played. The principal preceded me into both classrooms and invited me in after he had talked to the teachers.

When the "School Without Schools" program was initiated, several teachers were dubious about the effectiveness of such a program. Now they feel the program has been successful and some positive benefits derived from it. Teachers working with small groups of children in places outside the school discovered they were becoming better acquainted with their children and were teaching more material than would have been possible in the regular classroom. Some said their small group contacts were more successful than their one day in school contact.

A first grade teacher found that two children who she thought were possible retentions had made so much progress, as a result of small group work and parental help, would probably not be retained this year. Another teacher thinks parents have discovered that they can help their child make better progress in school and these parents will continue to help their children.

A teacher in the open space school said he thinks his students will have a greater appreciation of the quietness of their self-contained classroom. He also said he had picked up ideas for small group activities while in this building that he might try when he returned to his home school.

Teachers were not without problems or concerns in this crisis program. Some problems they shared, such as begging teaching materials each time at a new school site. One teacher said she had to haul three boxes of materials into the school just to teach reading, spelling, and math. She felt this moving of materials was burdensome. Others did, too.

Getting all the children to turn in their assignments was another shared problem. Teachers in the open space school found the noise.
level distracting, making teaching difficult. One teacher in this setting said her children from the traditional building viewed school in this new building as one big playday. Several teachers commented that all the children did here was watch what everyone else was doing. They did think the children would adjust to this learning environment if there long enough.

Not knowing the content of the television programs until the third week of the crisis program made correlating classroom activities with television programs impossible. Arranging and scheduling of field trips was difficult for some because of the great demand for trips. Organizing for the one day in school and organizing all the material for the out of school assignments was found to be a formidable task.

Teachers were also concerned about how much time and effort would be necessary to help those students who had not attended any of the school sessions and/or had not turned in assignments. They felt the gap in the achievement level would be even greater. Comments about the amount of time necessary for helping the children catch up range from "little time will be needed for catching up work" to "the children will never be able to make up the missed instruction."

Some teachers who had made arrangements to meet with small groups of children several times a week did not think much instruction had been missed. Yet, other teachers doing the same thing said they had only maintained skills and would need to concentrate their efforts on catching up on material that would have been covered during this time. One teacher thinks the results of the city wide tests will show how effective instruction has been.

It was not possible to interview many children but most of those to whom I spoke to wanted to go back to school for a variety of reasons.
They wanted to see their friends. They wouldn't have so much homework. Homework was getting harder. They wanted to learn. Then, there were those who said they liked staying home because they liked watching television or didn't like school.
On March 15th and 16th I visited the four schools that I had observed during the School Without Schools programs. Each school—McGuffey School, Huy Road School, Kent School, and Fairmoor School—were back in session full-time in their own school buildings.

I spent one half day in each school, observed a total of eighteen classrooms, first grade through sixth grade, and interviewed eight teachers. In these eighteen classrooms, seven were involved in reading activities, five in math, two in spelling, and one each in art, writing, language, health, and social studies. The methods of instruction in these classrooms were question-answer discussions and teacher demonstrations. In several classrooms children were engaged in workbook assignments and the teacher helped individual children as help was requested. When it was possible, I interviewed the teacher in the classroom. Not all the teachers observed were interviewed. Six teachers whose classes were not visited were also interviewed. I have included the list of questions used with my observation sheets. It was not feasible to cover all my questions in each interview. On two occasions in teachers' lounges, teachers in discussions about the School Without Schools program told me more about how they felt about this program than I had asked.

In one school where the principal limited the number of classrooms I could visit during School Without Schools, the same problem occurred again. The principal seemed somewhat more receptive to my visit this time and stated that he had made arrangements for me to visit the same two teachers I had visited before. However, when I expressed a desire to observe more
classrooms, this principal did not welcome my suggestion. I was able to observe only the two teachers.

All of the teachers interviewed in the four schools stated that they had resumed their normal teaching schedules. Some are not emphasizing any one area of the curriculum while others are. One second grade teacher said she always emphasizes reading and math with her children as they are culturally deprived and most of their first grade instruction focused on readiness activities. She felt she had to make up work even in a normal school year. A fifth grade teacher and a fourth grade teacher are concentrating on math but said they usually did this. Another primary teacher is spending most of the school day in reading and math instruction as her students are slow learners. Two teachers related they are emphasizing language instruction. One teacher said she always teaches only the basics.

Since I did not observe any science lessons or see much evidence of science being taught in any classroom during the crisis period or when schools were back in session, I made it a point to ask each teacher if she taught science. Nine teachers had not had any science lessons so far this year. Of these nine, two said they taught science incidentally— if children brought something to school of a science nature. Several of the nine teachers said they would start science soon. Some of the reasons given for not including science in the curriculum were, dislike of the textbook, dislike of a textbook approach, lack of equipment, lack of knowledge to teach science, lack of time, the having to share science textbooks, and the giving of grades in science every other six weeks compared to every six weeks for social studies.
Eight of the teachers interviewed indicated they were teaching science regularly. Seven of these were using a textbook to teach science and the eighth teacher used children's interests for her science lessons. A second grade teacher said she had attended grade level science workshops for Columbus teachers and had been given all the science supplies she needed. She said all Columbus teachers had the opportunity to attend these workshops. One teacher taught science instead of history in her class as she didn't have time to teach both and felt students found science more interesting.

Teachers' comments about being able to make up the instruction missed was divided. Six stated that they wouldn't be able to cover the same amount of material as in a normal year. One teacher felt she was five weeks behind and another said she was a whole unit behind in every subject area. Two teachers who had met every day with their children said that the children could not possibly accomplish what they would have if school had been in session and that the crisis program was a stopgap solution. Another teacher thought it was too early to tell if children would catch up.

Seven teachers thought the School Without Schools was a success. Three said that catching up wasn't necessary because of small group instruction in out of school sites. In some instances children made more progress in these small group sessions than they have in school full time.

In one school where students were in school one day a week and given out of school assignments, four teachers said the students weren't behind if they had completed their assignments and come to school one day a week.
When I questioned teachers about the benefits of the School Without Schools program, I found most teachers thought the parental help and cooperation were the greatest they had ever been. One teacher thought the donation of time by a TV station exceptional and the community support tremendous. Others cited small group instruction as advantageous to students as instruction was more effective and more individualization was made possible. They, also, commented that they were able to become better acquainted with their students in these small groups. Other statements were that parents had found out they could help their children learn and that learning could go on out of school. One said children discovered they could learn on their own.

While teachers felt there were positive effects from the School Without Schools program, some had concerns about its effectiveness. Some of the remarks were: "the program was not worthwhile but only a stopgap measure," "this year was a wipe-out because of weather and the energy crisis program," "the program was inconsistent - if children had to go to school every day in one building, then, children in all schools should go every day," "the best learning time was cut out of the school year as the weather would be getting warmer and children would not work as hard," "the program was overemphasized because of the need to pass a levy," and "the program was politically oriented."

After observing the School Without Schools program, interviewing teachers and later revisiting the schools, I did not find teachers trying new and innovative teaching methods or expanding any horizons.
of knowledge, other than one teacher expanding her students' horizons by taking them on a wide variety of field trips. I did find teachers using conventional methods of teaching, stressing the basics both times, and trying to meet childrens' needs under difficult conditions during the crisis period.
FIRST OBSERVATIONS
School Without Schools Program
Secondary Science Education

by

Arthur L. White

Abstract

The School Without Schools program was received with different judgments concerning quality by different people. Most all teachers were glad to be returning to normal. The upper-level students generally liked the freedom, flexibility and responsibility for pursuing their education on their own time. The younger and/or lower ability and lesser motivated students felt a need for more teacher contact. This contact served as assistance and clarification as well as motivation for them.

The teachers tended to follow a teaching pattern including reading assignments, worksheets, discussion and lecture concerning worksheets followed by quizzes and testing. Very little use was made of laboratory or other investigative activities in or out of class.

The type of resources which the teachers felt a need for were instructional units or packages which are self-contained. They should include objectives, references, materials, worksheets and evaluation materials or activities.

Most teachers and students felt the School Without Schools was better than no school but that it could and should be improved.
Source of Data

The data for this report were collected over a three day period from February 22, 1977 through February 24, 1977. This was the third and final week of the School Without Schools program in the Columbus Public Schools. The weeks preceding this three week time were plagued with days of school missed due to snow and cold. The week following the data collection was the spring break. The break was moved to early March to help alleviate the need for gas in the school buildings.

The classroom observations were obtained from high school and junior high science classes. The schools, courses, levels and topics are summarized in Table 1.

Table 1
Classroom Observations

<table>
<thead>
<tr>
<th>#</th>
<th>School</th>
<th>Location</th>
<th>Course</th>
<th>Topic(s)</th>
<th>Grade Level</th>
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<tr>
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<td>North High School</td>
<td>Physical Science</td>
<td>Chemistry Temperature Conversion</td>
<td>Modified 10 - 12</td>
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<td>North High School</td>
<td>Earth Science</td>
<td>Weather &amp; Glaciation</td>
<td>10 - 12</td>
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<tr>
<td>4</td>
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<td>North High School</td>
<td>Chemistry</td>
<td>Solution Concentration</td>
<td>11 - 12</td>
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<td>5 &amp; 6</td>
<td>Brookhaven High School</td>
<td>Linden McKinley High School</td>
<td>Chemistry</td>
<td>Molarity (Mole Problems)</td>
<td>11 - 12</td>
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<tr>
<td>#</td>
<td>School</td>
<td>Location</td>
<td>Course</td>
<td>Topic(s)</td>
<td>Grade Level</td>
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<tr>
<td>7</td>
<td>Medina Junior High School</td>
<td>North High School</td>
<td>General Science</td>
<td>Structure of Matter</td>
<td>9</td>
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<tr>
<td>8</td>
<td>Medina Junior High School</td>
<td>North High School</td>
<td>General Science</td>
<td>Metric System</td>
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<td>Crestview Junior High School</td>
<td>General Science</td>
<td>Weather</td>
<td>9</td>
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<td>Crestview Junior High School</td>
<td>General Science</td>
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<td>Linden McKinley High School</td>
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<td>Metric System</td>
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<td>General Science</td>
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<td>Linden McKinley High School</td>
<td>Health Science</td>
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<td>14</td>
<td>Hiltonia Junior High School</td>
<td>Briggs High School (Pilot)</td>
<td>Science</td>
<td>Earth's Atmosphere</td>
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</table>

The interviews were obtained from teachers and students in the classes, between classes, in the lunchroom, in study halls and in local eating places outside the school. The schools, individuals and settings are summarized in Table 2.
Table 2
Interviews

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<th>Individual</th>
<th>Setting</th>
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<td>1</td>
<td>North High School</td>
<td>Biology Teacher</td>
<td>Classroom (Homeroom)</td>
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<td>North High School</td>
<td>Student teacher (Ohio State Univ.)</td>
<td>Classroom</td>
</tr>
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<td>3</td>
<td>North High School</td>
<td>Physical Science teacher</td>
<td>Hall</td>
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<td>4</td>
<td>North High School</td>
<td>Chemistry student 11th grade girl - serious student</td>
<td>Chemistry laboratory</td>
</tr>
<tr>
<td>5</td>
<td>North High School</td>
<td>Chemistry student 11th grade boy - serious student</td>
<td>Chemistry laboratory</td>
</tr>
<tr>
<td>6</td>
<td>Brookhaven High School</td>
<td>Boy - not serious student</td>
<td>MacDonald's at noon</td>
</tr>
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<td>7</td>
<td>Brookhaven High School</td>
<td>Three special education teachers</td>
<td>Free period - empty classroom</td>
</tr>
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<td>8 &amp; 10</td>
<td>Brookhaven High School</td>
<td>Science Department Chairman &amp; Chemistry Teacher</td>
<td>During and after chemistry class</td>
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<td>English teacher</td>
<td>Teacher's lounge</td>
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<td>---------------------------</td>
</tr>
<tr>
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<td>General Science teacher</td>
<td>Planning period.</td>
</tr>
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<td>General Science student</td>
<td>During class</td>
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<td>Medina Junior High School</td>
<td>General Science student</td>
<td>Study hall</td>
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<td>14</td>
<td>Dominion Junior High School</td>
<td>General Science teacher</td>
<td>Lunch and class time</td>
</tr>
<tr>
<td>15</td>
<td>Dominion Junior High School</td>
<td>Three Health Science students - 8th grade boys</td>
<td>Lunchroom</td>
</tr>
<tr>
<td>16</td>
<td>Dominion Junior High School</td>
<td>General Science teacher</td>
<td>Classroom during quiz</td>
</tr>
<tr>
<td>17</td>
<td>McGuffy Junior High School</td>
<td>General Science teacher</td>
<td>Planning period</td>
</tr>
<tr>
<td>18</td>
<td>McGuffy Junior High School</td>
<td>General Science students</td>
<td>Class discussion following quiz</td>
</tr>
<tr>
<td>19</td>
<td>McGuffy Junior High School</td>
<td>General Science teacher and baseball coach</td>
<td>During study hall</td>
</tr>
<tr>
<td>20</td>
<td>McGuffy Junior High School</td>
<td>Health Science teacher</td>
<td>Before &amp; after class</td>
</tr>
<tr>
<td>#</td>
<td>School</td>
<td>Individual</td>
<td>Setting</td>
</tr>
<tr>
<td>----</td>
<td>-----------------</td>
<td>-----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>21</td>
<td>Hiltonia Junior High School</td>
<td>General Science teacher</td>
<td>Study hall</td>
</tr>
<tr>
<td>22</td>
<td>Hiltonia Junior High School</td>
<td>7th grade Science Pilot teacher</td>
<td>Lunchroom</td>
</tr>
<tr>
<td>23</td>
<td>Hiltonia Junior High School</td>
<td>7th grade Science Pilot students</td>
<td>Classroom</td>
</tr>
</tbody>
</table>

**Data Collection Guides**

Two instruments were used to guide the observations and interviews. The information collected was not limited to that included on these two forms. The instruments were:

A. School Without Schools: Observation Guide
B. School Without Schools: Interview Questions
SCHOOL WITHOUT SCHOOLS
Observation Guide

Observer: ___________________________  Date: ___________________________

School Building: ___________________________  Time: ___________________________

Observed Group: ___________________________

Subject: ___________________________  Grade Level: ___________________________

Topic: ___________________________  Group Size: ___________________________

ACTIVITY:

Taking attendance
Returning assignments
Collecting assignments
Clarifying assignments
Making assignments
Lecturing
Discussion
Laboratory
Demonstrating
Using AV materials
Asking questions
Answering questions
Testing
Disciplining

CLASS:

teacher centered ___________ student centered

important _______ trivial

order _______ chaos

exciting _______ blah

TEACHER:

excited _______ blah

organized _______ confused

pleasant _______ irritated

STUDENTS:

excited _______ blah

active _______ passive

cooperative _______ resistant
SCHOOL WITHOUT SCHOOLS
Interview Questions

1. What do you think of the School Without Schools program?

2. How has attendance been during this program?

3. What resources should be made available to make your job easier?

4. Did you try anything new or different that you are going to continue to do when you get back on the regular schedule?

5. Did you attempt to expose the students to new material and concepts or was the time spent on review?

6. If you had it all to do over again, would you change the way you handled the situation?

7. How did you provide for laboratory activity?
Distribution of Classroom Activities

The classroom activity can be organized into seven categories which account for the major portion of classroom use of time. These categories include activities related to:

A. Attendance
B. Assignment management
C. Instruction
D. Laboratory
E. Testing
F. Disciplining
G. Other

The distribution of time spent in these categories as derived from these observations is summarized in Table 3.

The major portion of the time was spent in instructional activities. The overall percent of time in instructional activity was about 55%. This ranged from a high of 82% for the advanced level science (chemistry) to 42% for the 9th grade science classes. Laboratory activity was also classified as an instructional activity.

More time was spent in the lower grades than in high school on classroom management such as taking attendance, dealing with assignments and other procedural matters. The 9th grade science teachers used more time for testing than did the others. The standard curriculum for 9th grade general science is a laboratory approach. The teachers either deviated from it or selected special units from it due to the laboratory constraints. Since they were teaching special units during the School Without Schools program many of them had made their plans.
so the unit would terminate on the last meeting before the spring break. This was partially related to the high percentage of testing observed. Students were generally not prepared and did not take tests and quizzes as seriously as the instructors thought they would.

Table 3
Distribution by Percentage of Time Spent on Activity, Categories

<table>
<thead>
<tr>
<th>Activity Category</th>
<th>High School Advanced (n=2)</th>
<th>High School General (n=3)</th>
<th>Junior High (9th) (n=6)</th>
<th>Junior High (7th &amp; 8th) (n=2)</th>
<th>Average Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>1.5%</td>
<td>1.7%</td>
<td>6.0%</td>
<td>10.5%</td>
<td>-5.0%</td>
</tr>
<tr>
<td>Assignment</td>
<td>6.0%</td>
<td>18.7%</td>
<td>14.3%</td>
<td>12.0%</td>
<td>13.7%</td>
</tr>
<tr>
<td>Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction</td>
<td>54.5%</td>
<td>60.0%</td>
<td>41.5%</td>
<td>59.5%</td>
<td>47.5%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>47.5%</td>
<td>0.0%</td>
<td>0.8%</td>
<td>0.0%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Testing</td>
<td>0.0%</td>
<td>13.3%</td>
<td>32.8%</td>
<td>15.5%</td>
<td>20.6%</td>
</tr>
<tr>
<td>Disciplining</td>
<td>0.0%</td>
<td>1.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Other</td>
<td>11.5%</td>
<td>5.3%</td>
<td>4.5%</td>
<td>2.5%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>
Pattern of Instructional Activities

The science instruction in the secondary schools can generally be characterized as follows:

A. Worksheets: The students were given handouts either prepared by or selected by the teacher. These handouts included questions and problems related to the topic under study. The students were to complete these worksheets and problems from week to week.

B. Lecture and discussions: The time in class (about 48% of the period – 20 minutes) was spent in discussing questions and difficulties encountered by the student. These difficulties were identified by the students in some cases and by the teacher in other cases. The response to student questions or teacher identified needs was mostly in a lecture mode once the difficulty was clarified.

C. Extra sessions: The teachers generally had some additional contacts arranged with the students. These were basically of three types: field trips, help sessions, or telephone contact. The attendance at these additional meetings was from 10 to 50%. Most teachers did not require or reward students specifically for attendance. Often a vague consideration at grading time was the only external incentive for students to participate. For the most part the teacher felt that those students who took part in the extra sessions benefited from them. They also felt that the students who were most in need did not attend.
D. Laboratory: There was little laboratory activity. Of fourteen classes observed, only two made any attempt to make use of the laboratory during the once a week required session. Major use was by a chemistry class which met in its home school. The class consisted of juniors and seniors who were college preparatory students. The comparable course for the school using facilities other than their own did not make use of the laboratory. The scheduling and the arrangements for use were deterrents.

Two of the 9th grade science teachers selected a unit on light from the science curriculum (IME) because the equipment for the laboratory consisted of simple items which would commonly be found at home. In these cases home laboratory experiments were assigned.

Classtime Atmosphere

Each of the class sessions, the teachers and the students were rated by the observer using the three different semantic differential items included on the Observation Guide. These ratings reflect the observer’s perception of the teaching style, importance of the content, the organization and motivational quality of the session, the interest, participation and cooperation of the students, and the motivational ability, organization and good nature of the teachers. Table 4 is a summary of these perceptions.
Table 4
Summary of Observer's Perceptions of the Nature of the Class, Teacher and Students

<table>
<thead>
<tr>
<th>CLASS:</th>
<th>Frequency</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) teacher centered</td>
<td>4 3 2 2 2</td>
<td>3.38</td>
<td>1.51</td>
</tr>
<tr>
<td>important</td>
<td>2 6 5 0 0</td>
<td>3.77</td>
<td>0.72</td>
</tr>
<tr>
<td>order</td>
<td>7 1 5 0 0</td>
<td>4.15</td>
<td>0.99</td>
</tr>
<tr>
<td>exciting</td>
<td>0 2 6 5 0</td>
<td>2.77</td>
<td>0.72</td>
</tr>
<tr>
<td>student centered</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TEACHER:</th>
<th>Frequency</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>excited</td>
<td>1 3 6 3 0</td>
<td>3.15</td>
<td>0.91</td>
</tr>
<tr>
<td>organized</td>
<td>4 3 5 1 0</td>
<td>3.77</td>
<td>1.01</td>
</tr>
<tr>
<td>pleasant</td>
<td>6 5 1 0 1</td>
<td>4.15</td>
<td>1.16</td>
</tr>
<tr>
<td>irritated</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>STUDENTS:</th>
<th>Frequency</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>excited</td>
<td>0 1 4 6 2</td>
<td>2.31</td>
<td>0.85</td>
</tr>
<tr>
<td>active</td>
<td>1 2 3 4 3</td>
<td>2.54</td>
<td>1.26</td>
</tr>
<tr>
<td>cooperative</td>
<td>5 6 1 1 0</td>
<td>4.15</td>
<td>0.90</td>
</tr>
<tr>
<td>resistant</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a) Each of the pairs of terms were coded from 5 to 1 from left to right
i.e.,

```
<table>
<thead>
<tr>
<th>term 1</th>
<th>term 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 1 2 3 4 5</td>
<td>5 4 3 2 1</td>
</tr>
</tbody>
</table>
```

value = 5 4 3 2 1
There was a great deal of variation in the focus of the activity in the class session. In some classes it was extremely teacher centered and in others it was equally student centered. The content of the session was considered important and an atmosphere of order prevailed. The sessions were not particularly motivating.

The teachers were neither inspiring nor totally bored with their task. They tended to be organized and quite pleasant with the students.

The students were not at all excited about what was happening during the class sessions. The degree of student activity varied from sleeping to complete involvement as in the laboratory. In almost all classes, the students did not resist the teacher and submitted to the instruction.

Reactions To School Without Schools

Teachers

Question 1: What do you think of the School Without Schools program?

The teachers reactions varied from "I like it" to "there has got to be a better way." The major concern of teachers was for the lack of motivation for the kids. Some blamed it on the parents, some on the vagueness of requirements by administration and some on the inappropriateness of the curriculum materials, activities and teaching methods.

It appeared that a large segment of the student population considered the whole episode to be an adventure and a vacation. The students did not expect to be held accountable for learning. The extensive use of ditto worksheets did not serve to motivate the students.
Most teachers did not develop creative uses of the situation. Few of the teacher identified activities and units were specifically suited to the School Without Schools schedule. Consequently the teachers spent their time running dittoed worksheets which the students spent their time filling out. After which the teacher spent their time grading.

One student teacher asked the students in his Biology class to keep records of food intake, energy output and weight change for part of a unit on nutrition. More activities of this nature would have been useful.

Two teachers remarked about the phenomenal amount of material which the students were able to cover. They are apt to let this new perception carry over and prevail in their teachings during the "normal" schedule. The level of understanding may be sacrificed for quantity.

Question 2: How has attendance been during this program?

The attendance at the one day a week sessions has been good. It has been as good or better than regular attendance (75% to 95%). The attendance on the day of the observations seemed to be below what it had been the two previous weeks. The attendance at the extra events, meetings and field trips was poor. It ranged from 0% in several instances to 50% for a trip to COSI or the Zoo. The teachers were very discouraged about the extra scheduled activities. Several thought that the extra sessions should have been required.

Question 3: What resources should be made available to make your job easier?

Teachers felt that the arrangement for buses to transport students on field trips was too much trouble and complicated. Some felt that
the buses should have been made available for extended trips. The attendance, or lack of, suggests that students have already been to the places selected. The apparent enthusiasm for field trips during the normal school schedule may be due to the desire to get out of school rather than to learn.

The teachers who met their classes in a classroom at some other school did not feel comfortable with using someone else's equipment. The communication and cooperation on equipment use needed to be encouraged and facilitated. One teacher felt that the administration should have mandated that each teacher mount a complete educational program. This might include instruction, laboratory, help-sessions, and evaluation plans.

If this kind of effort is to be repeated it would be appreciated by teachers if some instructional packages, for home use, were available. These should contain home laboratory activities, references, worksheets, quizzes, and equipment improving suggestions.

Question 4: Did you try something new or different that you are going to continue to do when you get back on the regular schedule?

Two points seem to reoccur here. Some teachers put worksheets (20-30 pages) together which they planned to use again. Some teachers discovered that they could cover a lot of material faster than they thought they could. No consideration was made for how much was assimilated by the student. Some teachers indicated that they were going to demand more of their students in the future.

Question 5: Did you attempt to expose the students to new material and concepts or was the time spent on review?
Most teachers went ahead with something new. Very few went on with the unit which would have been covered if no schedule modification had been made. Two or three teachers out of fourteen made use of the radio and TV broadcasting. Teachers tended to fall back on something in worksheet and handout form which they already had available.

Question 6: If you had it all to do over again, would you change the way you handled the situation?

The major reaction was to require activities. Do not leave to the students' option. Hold the students and the staff accountable for learning activities.

There were some suggestions concerning scheduling. It would be better to meet for at least an hour once a week and then set up a half-day schedule on another day. The students need teacher contact on a scheduled, required basis more than once a week.

Some teachers felt they needed to be much more precise in their instructions and assignments to the students.

Question 7: How did you provide for laboratory activity?

The majority of teachers did not provide any laboratory activity for the students. Some identified take home laboratory activities from the existing curriculum. One chemistry course was run entirely as a laboratory course with students spending ninety minutes a week in the laboratory.

Students

The chemistry students involved in the laboratory activity seemed to get along fairly well under the system. Some said it gave them an
opportunity to spend more time on chemistry. Some felt that they needed the day to day contact to keep moving. Without it, they felt lost.

Generally, the more motivated by grades, parents, and future plans the students were, the more apt they were to like the program. The lower level ability, younger and lower socio-economic level students were of two opinions.

1. It is ridiculous and we should change back.
2. It's fine as long as we don't have to make it up.

One student liked the schedule. He had already made $200 working with a building contractor to remodel a house. Another student voiced a favorable opinion because he could learn a lot more. He also cautioned that you had to learn not to put your work off until the last night. He had learned the hard way. He also commented that some courses require more frequent teacher contact than just once a week.

The lower ability students complained about School Without Schools being harder than regular school. It was also reported by some to be boring.
SECOND OBSERVATIONS
School Without Schools Program
Secondary Science Education
by
Arthur L. White

Source of Data

The data from this report were collected over a three-day period from March 15, 1977 through March 17, 1977. This was the second week of school following the spring break and the last week of the grading period. The grading period was extended one week.

The classroom observations were obtained from high school and junior high science classes. The schools, courses, levels, and topics are summarized in Table 1.

Table 1
Classroom Observations

<table>
<thead>
<tr>
<th>#</th>
<th>School</th>
<th>Location</th>
<th>Course</th>
<th>Topic(s)</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North High School</td>
<td>North High School</td>
<td>Biology</td>
<td>Normal Distribution</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>North High School</td>
<td>North High School</td>
<td>Physical Science</td>
<td>Water Purification and Household Chemistry</td>
<td>Modified 10 - 12</td>
</tr>
<tr>
<td>3</td>
<td>North High School</td>
<td>North High School</td>
<td>Earth Science</td>
<td>Exam Weather</td>
<td>10 - 12</td>
</tr>
<tr>
<td>4</td>
<td>North High School</td>
<td>North High School</td>
<td>Chemistry</td>
<td>Reaction Rates</td>
<td>11 - 12</td>
</tr>
<tr>
<td>5</td>
<td>Brookhaven High School</td>
<td>Brookhaven High School</td>
<td>Chemistry</td>
<td>Mass-Volume Relationships</td>
<td>11 - 12</td>
</tr>
<tr>
<td>#</td>
<td>School</td>
<td>Location</td>
<td>Course</td>
<td>Topic(s)</td>
<td>Grade Level</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------</td>
<td>-------------------------</td>
<td>-----------------</td>
<td>-------------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>6</td>
<td>Medina Junior High School</td>
<td>Medina Junior High School</td>
<td>General Science</td>
<td>Exam, Energy</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>Medina Junior High School</td>
<td>Medina Junior High School</td>
<td>General Science</td>
<td>Atomic Theory</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>McGuffey Jr. High School</td>
<td>McGuffey Jr. High School</td>
<td>Health Science</td>
<td>Respiration</td>
<td>8</td>
</tr>
<tr>
<td>13</td>
<td>Hiltonia Jr. High School</td>
<td>Hiltonia Jr. High School (Pilot)</td>
<td>Science</td>
<td>Observation and Interpretation</td>
<td>7</td>
</tr>
</tbody>
</table>

The interviews were obtained from principals, teachers, and students in the classes, between classes, in the lunchroom, and in study halls. The schools, individuals and settings are summarized in Table 2.
Table 2
Interviews

<table>
<thead>
<tr>
<th>#</th>
<th>School</th>
<th>Individual(s)</th>
<th>Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>North High School</td>
<td>Student</td>
<td>Biology classroom</td>
</tr>
<tr>
<td>2</td>
<td>North High School</td>
<td>Biology Teacher</td>
<td>Biology classroom</td>
</tr>
<tr>
<td>3</td>
<td>North High School</td>
<td>General Science Teacher</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>4</td>
<td>North High School</td>
<td>General Science Student</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>5</td>
<td>North High Street</td>
<td>Earth Science Teacher</td>
<td>Earth Science classroom</td>
</tr>
<tr>
<td>6</td>
<td>North High School</td>
<td>Chemistry Student</td>
<td>Chemistry classroom</td>
</tr>
<tr>
<td>7</td>
<td>North High School</td>
<td>Chemistry Student Teacher</td>
<td>Chemistry classroom</td>
</tr>
<tr>
<td>8</td>
<td>North High School</td>
<td>Chemistry Student</td>
<td>Chemistry classroom</td>
</tr>
<tr>
<td>9</td>
<td>Brookhaven High School</td>
<td>Chemistry Teacher</td>
<td>Chemistry classroom</td>
</tr>
<tr>
<td>10</td>
<td>Medina Junior High School</td>
<td>General Science Teacher</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>11</td>
<td>Medina Junior High School</td>
<td>General Science Teacher</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>12</td>
<td>Dominion Junior High School</td>
<td>Principal</td>
<td>Hallway</td>
</tr>
<tr>
<td>13</td>
<td>Dominion Junior High School</td>
<td>Students (3)</td>
<td>School Office</td>
</tr>
<tr>
<td>#</td>
<td>School</td>
<td>Individual(s)</td>
<td>Setting</td>
</tr>
<tr>
<td>----</td>
<td>--------------------------------</td>
<td>-----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>14</td>
<td>Dominion Junior High School</td>
<td>General Science Student</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>15</td>
<td>Dominion Junior High School</td>
<td>General Science Teacher</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>16</td>
<td>Dominion Junior High School</td>
<td>General Science Students (2)</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>17</td>
<td>Dominion Junior High School</td>
<td>Health Science Students (4)</td>
<td>School Lunch Room</td>
</tr>
<tr>
<td>18</td>
<td>Dominion Junior High School</td>
<td>General Science Teacher</td>
<td>School Lunch Room</td>
</tr>
<tr>
<td>19</td>
<td>Dominion Junior High School</td>
<td>General Science Students (2)</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>20</td>
<td>McGuffey Junior High School</td>
<td>General Science Students</td>
<td>General Science classroom</td>
</tr>
<tr>
<td>21</td>
<td>McGuffey Junior High School</td>
<td>General Science Teacher</td>
<td>Study Hall</td>
</tr>
<tr>
<td>22</td>
<td>McGuffey Junior High School</td>
<td>Health Science Teacher</td>
<td>Health Science classroom</td>
</tr>
<tr>
<td>23</td>
<td>Hiltonia Junior High School</td>
<td>7th Grade Science Teacher</td>
<td>Faculty Lunch Room</td>
</tr>
<tr>
<td>24</td>
<td>Hiltonia Junior High School</td>
<td>7th Grade Science Teacher</td>
<td>7th Grade Science classroom</td>
</tr>
</tbody>
</table>
Data Collection Guides

Two instruments were used to guide the observations and interviews. The information collected was not limited to that included on these two forms. The instruments were:

A. School Without Schools: Observation Guide
B. School Without Schools: Interview Questions

The interview questions for the follow up school visitations were different from those for the initial visits.
### Observation Guide

- **Observer:**
- **Date:**
- **School Building:**
- **Time:**
- **Observed Group:**
- **Subject:**
- **Group Level:**
- **Group Size:**

**ACTIVITY:**
- Taking attendance
- Returning assignments
- Collecting assignments
- Clarifying assignments
- Making assignments
- Lecturing
- Discussion
- Laboratory
- Demonstrating
- Using AV materials
- Asking questions
- Answering questions
- Testing
- Disciplining

**CLASS:**
- **teacher centered**
- **student centered**
- **important**
- **trivial**
- **order**
- **chaos**
- **exciting**
- **blah**

**TEACHER:**
- **excited**
- **blah**
- **organized**
- **confused**
- **pleasant**
- **irritated**

**STUDENTS:**
- **excited**
- **blah**
- **active**
- **passive**
- **cooperative**
- **resistant**
School Without Schools

Interview Questions

1. Have you noticed any good after effects due to School Without Schools program?

2. Have you noticed any bad after effects due to School Without Schools program?

3. Have you done any testing over material covered during School Without Schools program? How did the students do?

4. Are you doing anything differently due to the School Without Schools program?
Distribution of Classroom Activities

The classroom activities have been organized into ten categories which account for the major portion of classroom use of time. These categories include activities related to:

A. Attendance
B. Assignment Management
C. Use of AV Materials
D. Introduction
E. Teacher Demonstration
F. Laboratory
G. Working in Class
H. Testing
I. Disciplining
J. Other

The distribution of time spent in these categories as derived from these observations is summarized in Table 3.
<table>
<thead>
<tr>
<th>Activity Category</th>
<th>High School Advanced (n=2)</th>
<th>High School General (n=3)</th>
<th>Junior High (9th) (n=6)</th>
<th>Junior High (7th &amp; 8th) (n=2)</th>
<th>Overall (n=13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance</td>
<td>3.5</td>
<td>4.0</td>
<td>3.2</td>
<td>0.0</td>
<td>2.9</td>
</tr>
<tr>
<td>Assignment Management</td>
<td>3.5</td>
<td>12.0</td>
<td>7.2</td>
<td>47.0</td>
<td>13.8</td>
</tr>
<tr>
<td>Use of AV materials</td>
<td>0.0</td>
<td>0.0</td>
<td>2.8</td>
<td>0.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Instruction</td>
<td>78.5</td>
<td>23.7</td>
<td>34.3</td>
<td>28.5</td>
<td>37.8</td>
</tr>
<tr>
<td>Demonstration</td>
<td>0.0</td>
<td>3.3</td>
<td>2.8</td>
<td>0.0</td>
<td>2.1</td>
</tr>
<tr>
<td>Laboratory</td>
<td>0.0</td>
<td>29.3</td>
<td>12.3</td>
<td>13.5</td>
<td>14.5</td>
</tr>
<tr>
<td>Working in Class</td>
<td>0.0</td>
<td>0.0</td>
<td>13.5</td>
<td>0.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Testing</td>
<td>0.0</td>
<td>27.0</td>
<td>17.5</td>
<td>0.0</td>
<td>14.3</td>
</tr>
<tr>
<td>Disciplining</td>
<td>0.0</td>
<td>0.7</td>
<td>1.2</td>
<td>0.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Other</td>
<td>14.5</td>
<td>0.0</td>
<td>5.2</td>
<td>11.0</td>
<td>6.3</td>
</tr>
</tbody>
</table>
The major portion of the time was spent in instructional activities including lecture-discussion, demonstration, laboratory, and use of AV materials. The percentage of time for these combined activities was 55.7%. This ranged from a high of 78.5% for the advanced level science (chemistry) to 42.0% for the seventh and eighth grade science classes. These percentages are nearly identical to the values obtained during the School Without Schools program.

More time was spent at the seventh and eighth grade levels on classroom and assignment management than at the upper levels.

The class time spent in the various activities was not much different during the School Without Schools program and the follow-up visitations. There was slightly more time spent taking attendance and in testing during the School Without Schools program. There was less time spent in laboratory activity during the School Without Schools program.

Pattern of Instructional Activities

Patterns of science instruction were not readily observable. No one sequence of activities was predominant as it was during the School Without Schools program.

Most of the activity during this week had been devoted to review of work covered during the grading period. This period included the three weeks of School Without Schools program. In addition to review, the students were completing assignments, getting notebooks together to hand in and making up work missed. Most classes were taking tests or preparing to during this week. The students in the classes were generally attentive to the task at hand. Most of the teachers commented that the students were more appreciative of the school and valued the teacher more since the normal schedule had resumed. Most
of the students made some mention of how it was better, or important, or easier when you could listen to what the teacher said. For some this was a form of motivation, for some a chance to get things clarified, and for others an easy way out for getting a grade. "If the teacher tells you what he thinks is important, you don't have to worry about all the other things."

The results would suggest that the once-a-week aspect of the School Without Schools program did reduce the use of laboratory activities. From their data it is not clear what the influence of meeting in someone else's classroom may have had.

All of the teachers returned to the plans they had made prior to the energy crisis. Most reported being behind where they would normally be.

Classroom Atmosphere

Each of the class sessions, the teachers and students were rated by the observer using the three different semantic differential items included on the Observation Guide. These ratings reflect the observer's perception of the teaching style, importance of the content, the organizational and motivational quality of the session, the interest, participation, and cooperation of the students. Table 4 is a summary of these perceptions.
Table 4
Summary of Observer's Perception of the Nature of the Class, Teachers, and Students

<table>
<thead>
<tr>
<th>CLASS:</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) teacher-centered</td>
<td>2.92</td>
<td>1.12</td>
</tr>
<tr>
<td>student-centered</td>
<td>3.46</td>
<td>0.78</td>
</tr>
<tr>
<td>important</td>
<td>4.00</td>
<td>1.15</td>
</tr>
<tr>
<td>trivial</td>
<td>2.92</td>
<td>0.64</td>
</tr>
<tr>
<td>order</td>
<td>4.00</td>
<td>1.15</td>
</tr>
<tr>
<td>chaos</td>
<td>3.62</td>
<td>1.04</td>
</tr>
<tr>
<td>exciting</td>
<td>3.15</td>
<td>1.21</td>
</tr>
<tr>
<td>blah</td>
<td>3.38</td>
<td>1.46</td>
</tr>
</tbody>
</table>

| TEACHER: | | |
| excited | 2.92 | 0.86 |
| organized | 4.00 | 1.00 |
| pleasant | 3.62 | 1.04 |

| STUDENTS: | | |
| excited | 3.00 | 0.71 |
| active | 3.15 | 1.21 |
| cooperative | 3.38 | 1.46 |

a) Each adjective pair was coded 5-4-3-2-1 from left to right.

The class session ratings indicated a greater tendency for student-centered activities during the regular schedule than was the case for the School Without Schools schedule. The range of the scale was from teacher-centered = 5 to student-centered = 1. The mean for School Without Schools observations was 3.38 and for regular schedule it was 2.92. The other characteristics rated appeared to indicate no changes.

The ratings related to the teacher indicate the teachers were more pleasant (Mean = 4.15) during the School Without Schools schedule than during the regular schedule (Mean = 3.62).
The students were more interested, more active, and more unruly during the regular schedule than during the School Without Schools schedule.

Reactions to School Without Schools

Teachers

Question 1: Have you noticed any good after effects due to School Without Schools program?

The teachers who had extra sessions, field trips, and other personal contacts with students felt they got to know a few of the kids they had not gotten to know before. Some of the quieter students had an opportunity to make themselves known. Also, some students who did not do well under the School Without Schools program seemed to be working harder and applying themselves more now to make up for their loss. One of the teachers commented that the School Without Schools program gave him an opportunity to do some relevant science which the regular curriculum does not. Another teachers said it made him thankful for the facilities, materials, and conveniences he does have.

Question 2: Have you noticed any bad after effects due to School Without Schools program?

The teachers identified a variety of bad effects due to the School Without Schools program. The most common concern was with the break in the continuity of study habits and discipline for the students. The students were not ready to buckle down and work. They had "gotten by" with less effort and with a flexible, relaxed discipline, and tended to let it carry over when the regular schedule resumed. After being back on normal schedule for a week the students were about back to their patterns of before the energy crisis (both good and bad).
Many teachers felt that the kids were not accustomed to reading to learn. They seem to have become dependent on oral and visual learning. Most teachers have not required the students to read and understand on their own.

Question 3: Have you done any testing over material covered during School Without Schools program? How did the students do?

Most teachers who had tested the students indicated the results were not good. Some felt that the poor performance was due to the choice of units for the School Without Schools program, but more generally, it was due to the lack of daily reminders to students to study.

One teacher's records indicated that 10-60% of the homework assignments were not done at all. The top 10-20% of the students did well as usual.

Question 4: Are you doing anything differently due to the School Without Schools program?

The majority of the teachers indicated that they returned to the same patterns of instruction and classroom organization immediately upon return to regular schedule. Two teachers indicated that they were skipping some of the things they usually do as science demonstrations because they take too long. One teacher is demonstrating all the laboratory activities instead of having the students do them.

Students

The students were generally pleased to be back on regular schedule. Students indicated a need to have interaction with their teachers. One student said that he could not get into learning without the teachers interest and enthusiasm.

Some of the students preferred the regular schedule because it was easier. They complained of having to work harder during The
School Without Schools Program to learn the material. Many over-
looked the benefits which these added efforts may have. One of
the students said that he was much more efficient at home since he
could have a longer period of time in one block to do his school
work. "I don't waste as much time in between as we do at school."
The students could roughly be classified into one of four cate-
gories. First we divide them into serious students and "not so"
serious students. For the serious students, there is one group,
probably, the brighter group, which liked the independence of the
School Without Schools program because they could put in as much
or as little time as needed on each subject. The "not so capable"
serious students did not like the School Without Schools schedule
because they needed the discussion and explanation of the teacher
to learn. In the "not so" serious category one group liked the
School Without Schools program because they did not have to do any-
thing and they were not constantly being "bugged". The other group
wanted to pass the course but did not like the schedule because
there was too much reading and written work. They felt they could
pass by simply being in class and listening to the teacher. That
is a lot easier than doing all the work that was required during
School Without Schools.
SUMMARY OF FIRST OBSERVATIONS
School Without Schools Program
Secondary Math Education
by
Dwayne Channel  Peggy Kasten
F. Joe Crosswhite  Marilyn Suydam
Diane Thomas

Five evaluators visited the six assigned schools, talking with thirty to forty teachers and over one hundred students. After we had individually summarized our notes by writing responses to the set of questions, we compared our reactions. As a result, it seemed apparent that individual reports addressed many idiosyncrasies. Therefore, we are including one report which summarizes key points.

- With few exceptions, little change in curricular emphasis was noted. Many teachers were continuing with the content they would have taught had school been in regular session. Some were reviewing. A few were using content termed enrichment.

- "Business as usual" and "accept and make the best of the situation" seemed to be the prevailing reactions.

- Help sessions (in community buildings or by telephone) were provided by most teachers. Attendance at these was considered disappointing, though the chance to give individual help was judged to be useful.

- Review of homework, brief explanations, and question-answering were the typical methods used: this reflects no change from what can be viewed in the regular program. Activities and projects were used by one teacher, tests by one, learning packages by one: the latter was the most innovative approach seen.

- The textbook, the chalkboard, and worksheets were the only materials used by most teachers.

- Only two of the teachers were attempting to use the television lessons. No use was being made of radio or newspaper lessons. Many cited sequencing or insufficient information as the reason for non-use.

- Field trips were conducted by none of the teachers.

- There appeared to be a minimal degree of uneasiness about the situation. Teachers seemed more concerned about fulfilling contractual agreements than about quality of teaching. Students were concerned about the impact on grades more than any other factor (except the social one).
- Students felt that more homework than usual was being assigned.

- Attendance varied by school and to a lesser extent by level of class; the range was approximately 20% to 95% present. Attendance was declining each week (accentuated by the warm weather on the days we observed). The novelty effects appeared to be wearing off.

- Expectations of teachers varied by level of class. Most felt that slower students were being hurt by the program, while the most capable might be gaining in independence.

- Teachers expressed dissatisfaction with the way decisions about SWS were communicated, with the delay in making the decision, and with the "switching of signals".

- Many teachers considered SWS as the "best of the alternatives".

- There appeared to be little cooperative learning.

- Horizons did not appear to have expanded...
FIRST OBSERVATIONS
School Without Schools Program
Secondary Math Education

by

Observer A

1. What change in emphasis has occurred in the curriculum?
2. What was being taught?

In the first class which I visited, an applied math class, the teacher had selected various activities for the students to work on. These were paper-and-pencil activities, to be sure—but they were not activities which would have been assigned to the students in the regular school program. The students were interested and involved—to the point where they were using materials, such as playing cards, to devise ways of solving the problems in the activities. The teacher was excited and involved, too; while she commented on the additional time it had taken her to find the activities, she felt it was well worth it, for the students were displaying behaviors which they did not ordinarily exhibit. She commented that her higher-ability classes were working on projects, also an innovation for her, and all was going well.

I rather wish that had not been the first class I visited, for it was the high spot of my observations.

The next teacher had spent all three school days giving full-period tests. (That might be considered innovative for the SWS program...)

Teachers 3, 4, 6, and 9 were reviewing content covered before the SWS program.

Teacher 7 was a substitute who read the homework assignment to the students, then baby-sat for the rest of the period.

Teacher 7 had students working on the probability and statistics chapter from the end of the book, a chapter not ordinarily covered.
during the course. (We have for many years hoped that more teachers would teach probability and statistics; is the SWS program the way to accomplish this?)

Teacher 8 was working on new content, the number theory chapter, while Teacher 10 was presenting the three cases of percent in a way which indicated that it might have been new work.

3. What different teaching methods have been used during the three weeks? What material was used?
4. How have teachers organized for teaching?

Except for the first teacher I observed, there was no evidence of teachers using teaching methods which differed from those which they probably use in the regular program. Review of homework problems, a brief demonstration on the board of some point, and assigning of new homework appears, according to research, to be the modal pattern for secondary school mathematics classrooms, and the SWS program did not differ decidedly from this. Worksheets might have been used more frequently than in the regular program, but worksheets were the only material aside from the textbook and the chalkboard which I saw in use.

Only one of the teachers (and a student teacher at that!) was attempting to use the television lessons as a component of his instruction. A few others had suggested to students that they watch the television programs, but were not integrating it with their classwork. At least one other had not checked until I asked the question to find out how many of her students had viewed any of the lessons.

The teachers frequently commented that content of the television programs was not made known to them until after they had already planned their lessons for the SWS program; therefore, apparently,
they felt no responsibility for using it. Several others noted that the content on the television lessons did not parallel to what their students were doing.

No teacher appeared to be attempting to make use of radio or newspaper.

No teacher had taken students on a field trip.

5. What role changes have occurred for teachers?

Within the classroom, it was difficult to note any changes in role—with the possible exception of the first teacher I observed. A few were meeting students for extra help sessions during the days students were not in school; a few were talking regularly with students on the telephone. In such cases, they noted that they liked the chance to give individualized help, but little enthusiasm was done on this point.

6. Have teachers felt uneasy due to the new freedom? Have they taken advantage of it?

7. Have students felt uneasy due to the new freedom? How have they reacted.

Whatever was meant by the "new freedom", teachers seem unaware of it. Several felt they were working harder than in the regular program; several commented on the amount of pressure they felt because they were only meeting classes once a week. Most did not appear to want to talk too much about what they were doing on the other four days of the week . . .

Many teachers commented on SWS as the "best of the alternatives". In general, I was impressed by the positiveness of their attitudes. Even though several suggested other alternatives, they were questioning rather than upset. Several noted that they wished they had had more notice about the SWS program; they felt that the decision to open or close the schools could have been clarified sooner than
it was. Many felt that the influence and positive attitudes of parents was one of the most positive outcomes of the program.

Students varied somewhat by grade level, with most carrying on as usual, as if they always went to school only one day a week. A little more concern was expressed by students in grades 11 and 12 who were in the college-bound program. Many students were sleeping late, and enjoying a causal life; some with part-time jobs were working additional hours or full time; some felt that, because they had so much homework, they were going to get better grades than they had ever gotten. In general the attitudes of the students might be termed accepting.

8. What variability do you see among teachers, within classrooms, over grades, across schools?

Variability among teachers was present in terms of individual manner with students (not an outcome of SWS), discipline (problems appeared to be no different because of SWS), and the like; variability because of SWS was slight and has been noted previously.

The greatest variability across schools was in the number of students present: almost full classes in the northern-area schools, no more than 50% present in the center city school. There appeared to be a high correspondence with the usual attendance patterns in these schools.

9. What decisions had to be made by teachers? How did they decide? Could they have used more help?

The teachers had to decide what to teach during the days the students were in school, and what to do to provide help for students during the non-school days. In most cases, these were individual decisions. In one junior high school, teachers of Math 7 decided in a group meeting to use the probability and statistics chapter.
but even there not all teachers were using it. Perhaps they could have used more help—but perhaps they not have accepted it. A fine political line was apparently being walked... Teachers were allowed professional freedom, and it is obvious that there was no coercion to be innovative...

10. How have changes in setting affected the lives of teacher and student? How have they affected instruction?

The only ways in which the change in setting appears to have affected teachers and students is that the unfamiliar setting was slightly confusing or slightly exciting, and the lack of access to usual materials was slightly disturbing. In general, it was difficult to tell that the students were not in their home environments.

11. Are teachers concerned with anything? Are students concerned?

Teachers were slightly concerned with whether they could catch up, but most accepted the situation. The level of pragmatic facing of reality was high. Most students appeared to be accepting the situation with only the college-bound juniors and seniors facing a potential problem.

12. What evidence is there that students are learning?

There was no more or less evidence than there usually is...

13. What evidence is there that students' horizons are being expanded?

The answers to the previous questions should make this obvious: none.

14. How much catching-up time is anticipated to be needed?

The answer to this will vary by school and by class, depending on what content was taught during the SWS program, how well students were learning from homework, how many students were present and absent, and similar factors. In general, teachers appeared to feel that they would try to "catch up", but they probably won't.
Senior High School

Class: Applied Math

Present: 9 of 24 (usually 50% present)

Observed activity: (1) Review of activity assigned for homework
(2) Activity worksheet worked on in class, independently or in pairs or small groups

Teacher comments: Tried to use more games now, whereas I stick more to the book in regular class.
It's a lot of hard work -- hours spent going through books getting materials.
The students are learning -- but it may not show up on an achievement test.
Not being in own room has made a difference: would have liked our own school open more, to get materials.
Tried to talk with kids on phone, but didn't reach all -- especially lower groups.
Staff at this school seemed to give us the cold shoulder at first, but they warmed up as the weeks passed.
The kids are really into it: told they had to come, they do. They gripe about assignments, no lockers, etc., but nothing major. The college-bound were upset, especially at first: this isn't going to help them.
Over one month of missing book learning: there's no way to make up the time.
Haven't used field trips -- low groups won't come, upper groups are working on projects.
Haven't met with them separately, though some teachers have.
Observer comments: In class, there was good interaction between students and teacher. Attention and interest were good. The group seemed involved, and they were attacking the activities with some creativeness.

Class: Algebra I

Present: 16 of 30 (5 or 6 less than in past weeks)

Observed activity: Brief explanation of exponents, scientific notation, square roots, followed by open-book test

Teacher comments: If there had been more time for planning, it could have been worse: as a reaction to a crisis, there was more cooperation (from general public, too). Parents are not really encouraging kids to go to school (there is more bussing to their home school than to many other senior high schools, with kids coming from all over the city). The kids present are those with parents who do care, plus a few with nothing else to do. Many are working full time at their part-time jobs. The break in routine is really hurting students. Some don't know how to work without structure. There are differences between applied, regular, college-bound. Our kids need routines, daily help. Expect retention loss; they'll need review when they come back; some might give up or drop out. Once a week puts too much pressure on kids; to do it requires parental guidance, planning. It's good that the schools didn't come to a complete standstill. And it is successful to have as many kids show up as do is a good sign.
Trying to maintain basic routine/rhythm: I don't think we should go off on another course. There's some moving of assignments from another point in the year, but no field trips since they aren't integrated with what we're doing. Many teachers are doing what they normally would but at a different point in the year (e.g., trips to COSI would have been made in spring but were made earlier). A look at the kids might have thought school is not important. It's important to maintain the regular program, to teach as you would have anyway. Help those who are there; don't worry about ones who aren't there. Couldn't use "V since we're not at the same place, and you can't push the kids through. Perhaps we should plan "shutdown" periods; go 10-11 weeks, shut 2-3 weeks, etc. Or try trimesters, with double sessions during one of them. It's a rough time, but we're not going to stop, nor are we going to do busy work. Everyone has to accept, to be flexible. Certain things should be done because they need to be done. While some teachers are being creative, teachers don't need to be different. 

Observer comments: The presumption behind the last comment seems to be that teachers normally do a good job, therefore they shouldn't change their pattern in a crisis. Students had little to say (to me) about the situation: "It's O.K.", "I'd rather be in my own school", etc.
In the faculty lounge, it was "business as usual": cards, conversation (non-school-related), etc.
Administrator noted: attendance has decreased each week; some parents are surprised at how much homework the kids get -- but like it; central scheduling is needed for field trips and reservations (e.g., by COSI) should not be accepted directly; discipline maintained as in home school.

Senior High School 2

Class: Algebra I
Present: 24
Observed activity: Discussion of problems on board; homework then assigned. (Observed only last part of lesson.)
Teacher comments: Response to the program varies with initiative of the students: some are learning, some are not making "forward progress".
All in all, it's not as bad as I thought it would be.
TV programs were assigned only as supplementary activity, not integrated with program.
Observer comments: Attention of the group was varied (typical); most focussed on the teacher.

Class: Algebra I (student teacher)
Present: 22
Observed activity: Teacher asked several questions about problems on TV; skimmed through the content of the week's programs. Then stated that upon return to school they will review the chapter covered during February (including TV); there were no protests from approximately half the
students who haven't been watching TV (they disputed that it was assigned).

Teacher comments: More advanced students are doing more on their own; others need pushing.

Not sure about the value of the program; it's hard to keep going. It's helping some kids. It's probably the best of the alternatives.

I'm assigning 2 to 3 days work, not weeklong assignments.

If we knew farther in advance, it would have been better.

There was not time to plan field trips, etc.

Student comments: I like the program -- going to school once a week.

I'm not watching TV - can't get up that early (10 a.m.).

It takes too much time.

I'm doing more work -- my grades will probably be up.

Observer comments: Attention of students poor, few concentrating. Lack of confidence of student teacher evident at times.

Class: Algebra I (substitute teacher)

Present: 26

Observed activity: Homework assigned for this week and for March 8, 10, 14, 16, and 18: odd or even numbered problems on various pages; watch TV.

Students then asked for help with problems; the substitute said she is not a math teacher, therefore couldn't show them how to do the problems. General concern was verbally expressed by the class.

While the substitute baby-sat, I worked with a group of some questions.

Teacher comments: A shrug...
Observer comments: It is sad that an unqualified substitute was assigned during this period when students are in school so infrequently. That attendance was so good in this class in the third week of such treatment is surprising. Lacking other alternatives, she might have had students work with other students -- or she might have taught them the subject matter she did know -- or shown a film -- or.

Junior High School 1

Class: Math 8
Present: 21
Observed activity: Review of homework by giving answers to problems on board.
Teacher comments: More would be accomplished if schools were open, but this is one of the best alternatives. There has been excellent response to homework. I offered extra help, but they didn't want it. We selected a chapter from the end of the textbook that they wouldn't have trouble with (statistics) and with which their parents could help.
Half are doing problems from the newspaper for extra credit; half are watching TV (some watch algebra, which they thought was easier).
They're suffering in some areas: uncertain whether they'll catch up.
The independence of the students is greater.
It would have helped to have known about the program more in advance, with more time for planning; we
quickly put together lesson plans. But the
general attitude of the teachers is "take a big
sigh, then get in and do".
I'm a little disappointed in the kids, especially
that they didn't want to meet for extra help.

Class: Math 7
Present: 27
Observed activity: Students working on statistics worksheets.
Teacher comments: We're the best of a bad situation.
My slow eighth grade class is finding it hardest;
they need to be in school every day.
All have done homework, even better than usual.
About 6 to 10 are watching TV (the students commented that it was boring, the actors (!)
were terrible, it was a good review of metric).
The newspapers are not at their level -- too elementary!
Perhaps we shouldn't spend the whole day, including
study halls; half-day sessions with only classes
would be harder to schedule, but better.
We didn't know what was to be on TV in time to
make use of what was planned in our planning.

Class: Math 7
Present: 24
Observed activity: Homework handouts for the week handed out (teacher-prepared comments on the number theory chapter),
completed on board.
Teacher comments: I won't know how well things are going until I evaluate -- there will be a full-period exam on the Friday after they come back. I'm taking the work in sequence. Homework, attendance follow normal pattern. I don't teach over the phone; it's not logical. There's so much pressure: push-push-push to cover one class a week. Might it be better if we weren't open? I'm not sure, as far as the students are concerned: I need to evaluate their work first. It would cost more if we were closed.

Class: Math 8
Present: 25.


Teacher comments: I'm working on review of material taught earlier. Attendance is great; it's worked out well. I gave assignments for the entire period, meet students at the Rec Center 8-10 for individual help. It was disorganized at the beginning, but it smoothed out the first day. We could have used more notice, however. We needed more notice about TV and radio -- but the students are watching.

Observer comments: Attention pretty good: no noise but bursting out as papers are collected.
Some questions of whether they needed the review: all children answering responded without errors.

Junior High School 2

Class: Math 8
Present: 26

Observed activity: Lesson on board on three cases of percent.

Observer comments: During my limited stay in the classroom, much time was spent in sending students out of the room: "If you don't want to work on our one day, then get out." No opportunity to talk to teacher, since he was in the hallway talking with students.
FIRST OBSERVATIONS
School Without Schools Program
Secondary Math Education
by
Observer B

1. What emphasis, or change in emphasis, has occurred in the curriculum?

2. What was taught? Was it new material, enrichment, review?

Two of the three teachers that I observed had elected to cover enrichment material rather than go on with regular course work in all of their classes. The third teacher focused mainly on review and practice activities for his students during this period. All three teachers gave the same reason for their choices: they felt that if they stayed with the regular curriculum and tried to cover new material during this period, they would need to do a great deal of reteaching when students returned to normal sessions in March.

3. What different teaching methods have been used during the 3 weeks? What material was used?

Each of the three teachers I observed had proceeded differently. One teacher used only worksheets, giving his students drill work for homework (he estimated he gave about 15-20 problems for students to work each night as homework) and once, a take-home-test of computation problems. Two of the in-class sessions were used for going over some of these homework problems, while the third session was used as an examination period. A second teacher had students do individual or small-group projects (she said that the projects were not assigned specifically because of the unusual circumstances--she had planned for students in all her classes to do projects during this semester and she just re-arranged the time...
schedule a bit); class periods were devoted to getting help from the teacher concerning the projects or working together with other people in their group (in one class, students did seem to be working on their projects during the class period; in a second class, however, class time seemed to consist mostly of social chatter). Neither of these teachers made any use of radio, television, or newspaper lessons, beyond simply suggesting that students might follow some of the lessons on their own. Both teachers felt that the material being covered in the media lessons was inappropriate for their students, or at the wrong level, or at the wrong point in time for their classes. The students that I talked to in these classes seemed to have watched the first TV lessons and listened to the first radio lessons out of curiosity. They said that the 15-minute TV lesson was too short and that the teachers spoke too rapidly on the half-hour radio lessons for them to be able to follow what was being covered. Nobody would admit to watching or listening after that first day or so.

The third teacher, along with her student teacher, made learning packages for the students. A set of worksheets was given to each student; the first sheet listed assignments from the text that students were to work each day; in addition, the TV lessons were integrated into the assignments and worksheets were included to supplement the text and the TV. (In one class, students also were expected to complete 4 special short projects during this time—a floor plan, a family budget for a month, and income tax based on the IRS booklets—and were given additional worksheets to guide them in doing the projects.) In-class sessions were used for answering questions about the work students did on their own and for working sample problems that students would be encountering. Some of
the classes were given a take-home midterm test during this 3-week period; in other classes, a test over the material that the students were covering was announced for the second day back to school in March.

4. How have teachers organized for teaching (scheduled, used field trips, radio, TV, special meetings, time periods, change laboratory routines, done testing)?

In addition to the instructional organization described in question 3, the teachers made provisions to be available to their classes during restricted out-of-school time. One teacher said he organized tutoring groups for his algebra students and would contact these students individually if they needed help; for his applied mathematics students he felt that if they wanted to do the mathematics they would attend the once-a-week in-class sessions, and if not, he would make no effort to contact them individually. Another teacher has set up a time each day during which her students can phone her for help—also during this time she said that she calls the individual students who did not attend the in-class sessions, in order to check up on them. This teacher said that it was very difficult to arrange meeting places (her classes were not meeting at their home school, and she was not allowed to use the new school as a meeting-place during the "off" days) and so most of the individual help she gave to students was over the phone. The third teacher and her student teacher (who were meeting their students at their home school) arranged to be in that school two other mornings in the week so that students could come in then for help (no special room was assigned for this—they would meet in the corridor and find an empty room to use); they also gave students their home phone numbers so that students could contact them there, if necessary.
5. What role changes have occurred for teachers?

Overall, there doesn't seem to be much of a role change for the teachers that I observed. The only thing that was striking was the teachers' willingness to give out their home telephone numbers and their encouraging students to call them at home for individual help—under normal circumstances, the teacher-tutor role is usually confined to the school setting.

6. Have teachers felt uneasy due to the new freedom? Have they taken advantage of it?

Two of the teachers at one school mentioned that they were not given much planning time when the decision to begin the school Without Schools program was made (they were first told on Thursday that school would close on Friday, then later, that school would close on Tuesday of the following week) and were uneasy about that.

Otherwise, each of the teachers seem to view this as a short-term crisis situation in which they are responding as best they can. The "new freedom" doesn't involve radical changes in teaching approaches.

Have teachers taken advantage of the new freedom? The only ones I saw doing so were the third teacher and her student teacher, described in question 3. An administrator at one school remarked how difficult it was for secondary school teachers to arrange special activities such as field trips for their students—one, because students did not all come from one location in the city so that it was difficult to get everybody together at the same time for a trip, and two, because there were scheduling conflicts (some individual teachers would make arrangements with places like COSI on their own, rather than going through a coordinating center at the Board of Education. As a result, sometimes classes would have a place to visit but no busses to get there, and in other cases,
busses would be available but the institution being visited had a full schedule at the time that the classes wanted to come.)

7. Have students felt uneasy due to the new freedom? How have they reacted?

Teachers feel that students are reacting according to a pattern—those who were normally good students and conscientious about attending school and doing schoolwork still are, and those who were erratic still are.

Attendance for this third in-class session in the "inner city" school was down somewhat from the first two sessions. For the classes that I visited:

"Inner City" School
   Applied Math--9 present (13 or so would come in the regular sessions)
   Algebra II--20 present (normally 26-27)
   Geometry--16 present (usually 28)

"Outer City" School
   Geometry--21 present (usually this number in class)
   Algebra II--21 present (again, usually this number)

Students were emphatic in saying that they were getting more written work than usual. At the "inner city" school (as mentioned in question 3) students said that they were not watching TV or listening to radio lessons any more (they also said these lessons were boring)—but then, their teachers were not following up the media lessons in any way. I did not get to ask students at the "outer city" school how they felt about radio-TV lessons.

8. What variability do you see among teachers, within classrooms, over grades, among schools?

See response to question 3. Also, attendance at the third session seemed to be better at the "outer city" school than at the "inner city" one.
9. Is there any unrest developing among teachers, students?

Some of the teachers were unhappy about the "non-sharing" policy they found at their non-home school--they had to bring things like dittos, paper, and attendance slips with them from their home school. (This policy evidently was not system-wide, however.)

10. What decisions had to be made by teachers--what did they decide--how did they decide? Could they have used more help? What?

The teachers at both of the observed schools said that there was no uniform policy within their mathematics department (or within the school itself) concerning what to teach or how to teach it. The decision to follow the usual curriculum, or to introduce supplementary materials, or to use the 3-week period as a review-and-practice was up to the individual teacher, as was the decision to use worksheets or to use the special media lessons or to stick to the text. The feeling of the teachers at both schools was that their respective administrations gave teachers good cooperation and were well-organized, that help was there if the teacher requested it, and that teachers were notified about what was going on as well as could be. One teacher remarked that he felt that the teachers had been treated as professionals.

11. How have changes in setting affected the lives of teacher and student; affected instruction?

The students are expected to do more of the work on their own and to rely on more than just the teacher for explanations of the material being covered.

12. Are teachers concerned with anything? Students concerned?

All of the teachers felt that the slower students in their classes were not being helped by the once-a-week class schedule, that these
students needed more supervision than they were getting in doing the
classwork and homework assignments, and that parents (especially
those of the "inner city" students) were not helping the students.

13. How do teachers/pupils spend their time?

   In class: Teachers lecturing or working examples, one teacher
talking with individuals or small groups about their projects.
Students listening or asking questions, one class taking a test.

   Out of Class: Students say they are very busy with school-
related activities (doing homework, using the library, going to
athletic practice at the school).

   Teachers say they are very busy with paper-grading, planning,
helping students individually either at school or over the phone.

14. What evidence that students are learning?

   Teachers at both of the schools graded all the worksheets given to
the students. Two of the teachers had used take-home-tests with their
classes (one of the teachers included problems on the test that had not
been covered in the in-class sessions so that students would have to work
some on their own), one teacher used the third in-class session as an
examination period, another announced a test for the second day back in
March. For the teacher who had students working on projects during this
time, the evaluation will come both when the students present their pro-
jects to the class in an oral report form and when they hand in a written
report (both will happen later in the semester).

15. What evidence that students' horizons are being expanded?

16. How much catching-up time is anticipated to be needed?

   All of the teachers I observed intended to return to where they left
off in the regular curriculum when school resumed in March. The two
teachers using enrichment materials during the school without schools period had indicated that they normally would have included some of these enrichment topics during the semester but had just shuffled the schedule a bit, so that they anticipated that not much time would be lost overall.
FIRST OBSERVATIONS
School Without Schools Program
Secondary School Mathematics
by
Observer C

1. What change in emphasis has occurred in the curriculum?

There appeared to be no major change in the curriculum. In nearly all classes a "business as usual" attitude prevailed. Occasionally a unit or chapter was taken out of the sequence of the text. It seemed that this was usually done for one of two reasons: rarely an attempt was made to coordinate with TV lectures or a topic was covered that was not considered to be "essential". These two occurrences were the exception; in general, material covered was what would have been covered during regular school.

2. What did they teach?

In nearly all cases teachers classified the material they were covering as new. One felt it was new and enrichment.

3. What different teaching methods have been used during the three weeks? What material was used?

I saw no "different" teaching methods. My observations were in classes where "traditional" methods were used. I saw lectures and homework assignments being graded -- little else.

In general the material used was the text. Several teachers had made assignment sheets for the entire SWS time period.
I. Also though I did not observe it, some teachers were able to do tutoring at times when their schools were not in session. One teacher felt this was the most positive aspect of SWS -- time to give individual attention outside of class. Some disappointment was expressed at the small number of students who took advantage of these sessions.

4. How have teachers organized for teaching?

Field trips? In math? I found no teacher who had taken field trips. The majority of the teachers were operating their classes without consultation with other teachers or any emphasis on TV lectures.

5. What role changes have occurred for teachers?

In general, no significant role changes were evident. A few did develop a more personal and tutorial relationship with a few students.

6. Have the teachers felt uneasy due to the new freedom? Have they taken advantage of it?

I don't understand this question. The teachers I talked with seemed to feel less "freedom". They had a great amount of material to cover in a short time.

7. Have students felt uneasy due to the new freedom? How have they reacted?

My impression was that the students did not feel uneasy. The teachers felt that while reactions among students were varied, the reaction from individual students were usually predictable, that is, the students who had always been responsible and hard-working continued
to be responsible and hard working, while those students who were inclined to goof off continued to goof off. In general, though, teachers praised the reaction of students. A few were said to perform above general levels.

8. What variability do you see among teachers within classrooms, over grades, across schools?

Though I'm not sure it fits here, I saw no classroom that was relying on TV lectures. A few of the teachers advised their students to watch it, but I could detect no attempt at follow up.

The other variability I saw was a function of teacher personality and had little to do with grades or schools or the Schools Without Schools program. It should be noted that I observed in only two schools -- both junior highs and both kid of typically middle class.

9. Is there any unrest?

Not that I could detect. Though of course teachers would have preferred a more conventional calendar. Students and teachers seemed glad it was the last week for Schools Without Schools.

10. What decisions had to be made by teachers? What did they decide? How did they decide? Could they have used more help?

I think nearly all curricular decisions were made by teachers. Most of them decided to take the material that they would have ordinarily covered and cover it.

Whether or not they could have used more help may be a matter of opinion. I think they could have.
11. Have changes affected the lives of teachers and students? Have they affected instruction?

Well... the kids have more free time (in spite of the fact some reported that more homework was being assigned). The burden on teachers was a big one if they were conscientious and tried to teach, be available for help sessions, and grade massive amounts of homework.

12. Are teachers concerned with anything? Students?

Teachers are concerned with "getting as far in the book as they got last year".

Perhaps because I saw junior high, the students did not seem concerned. They were not thinking ahead to what, if any, long-term effects SWS would have.

13. How do teachers and pupils spend their time?

During the time a given school was in session, they spent their time in a usual manner. Classes seemed to be being run in the same way they were run during regular school.

14. What evidence is there that students are learning?

I can't think of any. One teacher felt learning was more surface because there was no time for reinforcement. Most felt students were learning.

15. What evidence is there that student horizons are being expanded?

With the exception that some seventh grade (?) teachers were doing a statistics and probability unit that is not usually done, I don't think I saw any horizons being expanded.
16. How much catch-up time is expected to be needed?

Teacher answers to this question ranged from: "I'll never catch up" to "one day". Some teachers view SWS as three weeks lost, others feel they have covered nearly as much material as they would have if school had been in session.
FIRST OBSERVATIONS
School Without Schools Program
by
Observer D

Following are my individual reactions based on visiting several classes, talking with seven mathematics and five non-mathematics teachers, and interviewing well over fifty students. I have shared these individual observations with Marilyn Suydam and she will attempt to incorporate them in a consensus summary.

1. At both the high school and junior high school levels, there seemed to be only very modest changes in emphasis in the mathematics curriculum. The general rule seemed to be that teachers continued in the sequence of lessons they would have taught if the schools were operating normally. The variance from normal practice was more in pace than in content. Some teachers, particularly those of more advanced classes at the high school level, tried to give long-range assignments to cover a normal three-week period. My impression was that this was only moderately successful and that the strategy was not sustained after the first week. Highly motivated students did attempt to follow through initially on such assignments but, unless they were also quite capable, they ran into problems they could not handle alone.

Even with the "help sessions" conducted at local recreation centers, churches, etc., the students found it difficult to move very far in their texts without teacher guidance. In slower high school classes, such as Consumer Mathematics or Applied Mathematics, and in the general courses at the junior high school level, the more common pattern was to teach a single lesson each week with a more substantial homework assignment than usual. In the Consumer Mathematics course...
at Brookhaven the teachers introduced an Income Tax unit but this does not represent a major departure from the usual curriculum in that this unit is regularly used at about this point in the year.

2. There was little evidence that mathematics teachers were making any systematic use of the televised lessons in mathematics. A few teachers suggested that students view these programs and some indicated that the students could gain "extra credit" if they followed the lessons and recorded their content. Even in classes where such extra credit was indicated, I talked with no students who had viewed the programs consistently and almost all said they had not viewed them at all. These students did indicate that in some of their classes (other than mathematics) where the teachers had attempted to relate directly to what was being done on television, they had viewed a number of the programs. The common reason given by both teachers and students for not utilizing the television programs was that the lessons were out-of-sequence for their class—either the lessons had already been covered or (more often) the class was not yet ready for those lessons. I also had indications from the teachers that they felt the television lessons were too quickly paced—for example, linear measurement in the metric system was covered in 15 minutes on television and they could have devoted several 40-minute classes to this topic.

3. My observations did not suggest that teachers were using methods other than those they would normally use. In fact, I saw nothing happening in mathematics classes that I have not observed hundreds of times before. The pattern was primarily one of working problems from the homework assigned the week before. Since this was the last lesson before vacation, the teachers were not often assigning additional work. In several cases, students indicated that the assignments made during SWS were not due until after vacation and many indicated that they would not do it until just before it
was required. In general, with respect to teaching methods, it seemed to be a "business as usual" approach.

4. Most teachers arranged to conduct problem sessions in recreation centers or churches. Attendance at these sessions seemed disappointing—for example, several teachers indicated that they had as few as 3 or 4 students show up for some sessions. Others had 12-15 but even that represented less than 10% of the potential attendance. Only those teachers of more advanced classes indicated satisfaction with attendance at problem sessions.

Some teachers did say that they had talked to a number of students on the phone but in my sample of over fifty students interviewed, I did not locate any of these students.

I found no teacher who indicated they had taken mathematics classes on field trips although this seemed a rather common occurrence in non-mathematics classes. Neither did I find any use of laboratory lessons, or gathering data from non-text, non-school sources. None of the teachers I saw had given tests during SWS.

5. I did not feel that teachers had made any conscious change in their role beyond conducting the problem sessions at non-school locations.

6. Some teachers indicated an uneasiness—but not often about their teaching. They seemed more concerned about "getting behind" and extent to which they were fulfilling their contractual obligations. If mathematics teachers "took advantage" of the situation, I saw little evidence that it was in the direction of improving mathematics instruction. Their use of the additional free time created by SWS seemed to be highly idiosyncratic.

7. Students seemed to have adjusted more easily and more quickly than did teachers. Several teachers made a point of telling me this. The only student concerns
I encountered were with respect to the possible impact on their grades, whether they might have to "make it up" during the summer, and the disruption in their personal and social life. Some students at the junior high school level expressed concern about having missed some element in their program for the full three weeks because they did not happen to meet that class on Thursdays and the school always ran on a Thursday schedule.

8. There was a great variability among the teachers. This was most dramatic in their level of expectations. In fact, this seemed to me to be possibly the major source of differences in student performance. Student interviews revealed quite clearly that they worked for those teachers who expected them to work and this seemed at least somewhat independent of the pattern of their interests. Often the same teacher held quite different levels of expectation for the students in his separate classes—usually expecting substantial effort from the college-preparatory student and little if anything from the general mathematics student. This may have been a legitimate response to a great variability in attendance by level of course—with 80-90% attendance in the college-prep classes observed and 25-50% in the Consumer or Applied Mathematics classes. Attendance at the junior high school level seemed more stable across classes and teacher expectations seemed more stable as well.

9. Several teachers expressed the belief that one could sustain SWS for only a limited time. The novelty effect seemed to carry things along the first week or so but teachers felt this was wearing off and that the situation would deteriorate seriously if they had to go on much longer.

10. Both teachers and students expressed some dissatisfaction with the way decisions were made and communicated. Students attributed some of the low attendance to the impression, apparently widespread, that school attendance during SWS was voluntary. Teacher dissatisfaction seemed primarily to be
with delay in making a firm decision and the "switching signals" they received at different points. I did not see evidence of cooperative planning among the teachers. It seemed more a matter of "every man for himself".

Of course, there may have been much more cooperation than I observed.

NOTE: Much of my impressions came from student interviews. It should be remembered, of course, that I talked only with students who were in school. One might get very different impressions from those who were not.
Question: What was taught and what methods and materials were used?

Response: Most mathematics teachers attempted to cover or review the regular curriculum but the pace of coverage varied greatly from teacher to teacher. Some gave the students long-term assignments with the requirement that all work be completed by the first or the middle of March. These teachers used their weekly class meetings to clarify the assignments, help individual students, and answer group questions. Very little content teaching and in some cases, very little student work was observed in these classes. Many of the students in these classes indicated that they had been given more work than they could complete and that the amount of work required exceeded their normal work requirements. One student reported that she had given up trying to get the work done since she could not get help often enough.

For those teaching one lesson per week, class activities did not differ greatly from what would normally be found during regular class sessions. For the most part students in these classes were much more positive and more likely to be involved with the lesson.

No enrichment materials were seen other than the use of income tax forms in a couple of applied math classes. These were used on an individual basis and some students did very little work with them. Other than this, no other materials besides the textbook and dittoed worksheets were utilized in the classes.

The attendance in the classes was poor. The highest percentage present was 81% (17 of 21) in an analytic geometry class. The lowest percentage of attendance was 21% (6 of 28) in an applied math class. Most teachers reported that they had experienced higher attendance rates during the first two weeks of
SWS. Students who attended gave reasons such as parental pressure, fear of lower grades, socialize with friends, and to break the boredom. They indicated that those who were absent were working full or part-time jobs, were sleeping at home, found school too far away to walk, or thought the one day per week session a waste of time.

Question: What resources outside the school have been used?

Response: Every teacher provided for extra help sometime during the week. Some used telephone calls, others met students in churches, shopping centers, movie theaters, etc. The high school student attendance at these sessions was poor for all but the advanced math classes. One teacher reported to have called between 40 and 50 students to set up a session and only one student attended. Junior high teachers reported greater success with these sessions. Some of the junior high students found it difficult to work sessions for different classes because they were located at different places and times. They suggested that the times and places for these sessions be better coordinated.

Only one teacher required his students to watch a TV program. His geometry students were held responsible for the constructions and were to use the TV lectures instead of waiting for any class lectures. He felt he could gain back about 6 to 8 days for instruction of other topics if he used the TV lectures. Other teachers indicated they offered extra credit or would allow students to replace assigned work with written reports of the TV lectures. These teachers reported that not one student had taken advantage of these offers. Students said that they had watched the math program on TV once or twice and had found that it was no relevant to their assigned school work. Many said they did use the TV for history, English, and health science because their teachers had made assignments which related to or incorporated the TV presentations but this was not the case for math.

Testing or grading in any class was rare. (One class was given a test.)

The students were told to expect tests during the first week of regular session
by one teacher. Grades for this period were to be based, for the most part, on the homework that had been assigned. Some students indicated that their teachers based part of the grade on (or gave extra credit for) their attendance at the school and help sessions. (For some of these students this was their only reason for attending.)

**Question:** Are there any teacher concerns?

**Response:** It was apparent that some teachers did not know how to handle the SWS situation particularly with the lower ability math students. One teacher requested that no one observe his applied math classes since the students were not working and nothing was being accomplished. Many teachers were trying to cover the text material at the usual pace and students complained of too little guidance. Teachers did feel that the slower student was being hurt by the absence of a regular school program. The concern was less pronounced for the average and above average students. Some felt that their most capable students were actually learning more since they had developed independent study habits and could make better use of the help sessions.

One teacher felt that holding classes in another building made it more difficult to deal with problems of discipline and tardiness but he did not know a solution to this.

**Question:** Are there any student concerns?

**Response:** Students seem to have handled the SWS situation very well. Most felt they were learning just as much as in regular school classes and none felt they would be at a disadvantage if compared to other students who had received regular school instruction during this period. Some of the concerns expressed centered around the lack of or inconvenience of transportation, the location and time of help sessions, the lack of organized sports programs between schools, and the high cost of the week-long physical education activities that had been organized.
Question: Is there any unrest between students and teachers?

Response: Teachers reported a drop in student enthusiasm as the SWS program progressed. This was indicated by dropping attendance rates.

One student felt that this had improved relationships between students and teachers since it gave the teachers a chance to relax and talk to individual students about their problems.

One teacher felt that the novelty of the SWS program had worn off and students were becoming restless.
SECOND OBSERVATIONS
School Without Schools Program
Secondary School Mathematics
by
Observer A

Follow-up Evaluation Visits: A few points in particular are:

1. Since we saw little that was innovative in SWS, it was evident that we would see little innovation carried forward from SWS. It was nevertheless disheartening to see instances where a promising practice in SWS was not being continued in regular session.

2. The adjustment from SWS to regular session seems to have been accomplished easily. While there is some concern about catching up, the resulting pressure has been accepted at a minimal level. The lack of clear administrative decisions about attendance, credit, and grading are sources of frustration. But, in general, "acceptance" is the key word to describe the attitude of teachers and students.

3. While most students behaved as teachers expected (in terms of completing homework, etc.), in at least one instance poorer students performed better than expected.

While few innovations were seen in the (now random) selection of mathematics classes we observed, it must be remembered that some mathematics teachers were innovative. Not the least of these were the teachers preparing the television lessons.

School #1

From "business as usual" in SWS it's "back to business as usual" in regular session. Getting back to order and re-establishing the routine seems satisfying to the teachers with whom we talked.

There is relief at being back in their own school. There is relief
at being back with their textbooks. The teacher who in SWS had been using activities with Applied Math students is having students work examples from the textbook -- that is, half of the students were doing the examples, the other half were sitting. (In SWS, students in the same class were all involved.) In that teacher's other classes, projects continue at home (on their own), since they are what the classes usually do. The projects are due in May other years; therefore the students have tried to turn them in now since the work was completed during SWS.

If planning for SWS could be redone, this teacher would do more structured assignments in the regular material in the textbook rather than supplementary material. The teacher is concerned about the lack of time: all the usual content will not be covered by the end of the year. The content will not be covered in depth; e.g., emphasis will be on recognition of shapes and equations rather than analysis of properties. The teacher felt that the better students were hurt by the lack of review, especially in terms of the Math Contest last weekend. For grading, attendance will be counted, plus part of the SWS homework assignments.

Classes have had tests during each week since regular school resumed.

A second teacher also had the students working in class from the textbook, doing an assignment on budgeting. The first week back in regular session was spent in review. He felt that students had reacted well, with relief, to the transition back to school, back to the normal routine: they were motivated to do well now that school was "counting" again. When asked what he would do differently if he could plan again for SWS, he discussed the field trip to a bank he was planning for next week, pointing out that he could not take a field trip during SWS because the needed preparation had not been done. He felt that because of the methodical nature of mathematics, students might have been hurt more in mathematics than in other areas.
He felt that students wouldn't reach the same point as in other years, but they weren't three weeks behind, and there are ways to catch up — such as eliminating a test. For grading, homework or making up work will count, with little accounting for attendance.

Both teachers seem to treat review time as "lost" time.

Attendance was at the normal 50% level.

School #2

As in School #1, it seems to be a relief to be back in regular session (this school was "at home" during SWS). The classes visited were being conducted primarily through discussion.

One teacher had put a challenging problem on the board, and the class was attempting to solve it. The teacher suggested three general alternatives; he then led them to think of analogies: both are useful problem-solving strategies. The problem was unresolved at the end of the period, and therefore added to the homework assignment.

He felt that the students had lost out in terms of what they could have accomplished had school been in regular session. Classes in which discussion was emphasized were hurt more than those in which the class could learn by reading on their own. He felt that his worksheets were not sufficiently adjusted so they could continue on their own during SWS. If he had known about the TV and other features of SWS in advance, he would have liked to have tied these in more. A few of the students had questions about points in the TV programs, but most did not benefit markedly from the TV programs since the content was not what his classes were covering. Where content was parallel, some learned from TV. For grading, he is now giving tests covering material assigned during SWS; therefore the SWS learning will be embedded in grades.

A second teacher felt that students had suffered more in mathematics
than in other classes, because of the obstacles so likely to be met in mathematics, the need to go into details. Differences in learning were apparent between students in, e.g., Applied Math and Geometry -- the latter generally worked harder. He is giving quizzes to add marks for grading purposes (rather than mark on the basis of one test), though he would rather strongly favor the Pass-Fail system now rumored. He felt that he'd probably do little differently if he could replan for SWS.

A third teacher felt that SWS had made little impression -- the students who would have learned in regular session learned during SWS because they did the assignments; the students who learn little in regular session did little work and therefore learned little in SWS. Almost all were now working to catch up; how well they did would vary by student.

A fourth teacher felt that the students were catching up faster than he'd expected. Since he had assigned TV and the content was parallel, he felt that students had learned from it.

SWS was a period to go through -- it's now over, period, we're back to usual. Students talked to in the hallways merely expressed a "so what's to talk about" attitude. SWS is long in the past, and school is back to its anticipated routine.

Since attendance was high during SWS, no significant difference was observed.

Little can be added from visits to other schools. Teachers and students have readjusted to the routine of school. Grading for the period and "catching up" are mild worries -- accepted as acceptable.
Teacher 1 -- Evidently the Columbus downtown administration has not yet decided what school-wide policy should be used for grading student work done during the SWS period—a pass/fail option was considered, "extra credit" was another option, as was a "grade as usual" policy, but no final decision has been communicated to the teachers. This teacher's reaction was "It's criminal!"

Her evaluation of the students' work done during the SWS period showed that performance was poorer than usual. This teacher and her student teacher had made a special effort to integrate TV lessons with special worksheets and text material into learning packages for the students, and both teachers were available to students in addition to the once-a-week class sessions. The geometry students did not take the initiative to come in for extra help; they seemed to have watched the first TV lesson, but none after that. (The teacher felt that the TV lessons were clear, well-paced, and at the proper level for her classes, so that the students should not have experienced that much difficulty with them.) The Algebra II students did not do as well on the tests and homework on rational numbers as was expected; the teacher attributed this to the fact that these students were not mature enough to do so much of the algebra.
on their own, even with her guidance through the learning packages and the in-class sessions. She felt that the 3-week period was especially hard on students in the upper level math courses.

Some of her Contemporary Math students, who had four special projects to do in addition to the learning packages, pleasantly surprised her—she said that some of these students who had usually not responded well to the regular work had made good attempts (or, even just some attempt) on the projects. She also commented that the nature of the projects (a home floor plan, a personal cash flow record, a family budget for a month, and income taxes) had made her much more aware of the students' home life and of the problems they bring to school with them than did any other work she had done with them previously.

Teacher 2 -- (This teacher had not been interviewed previously.) This teacher felt that during the SWS in-class sessions he was much better prepared than usual (he made special overhead transparencies for his lessons and "covered many more examples")—he felt he taught about two days worth of material at each one-day session. He noted that this has affected his pacing in class now, that he gets more material into a period because he is much better organized than before. The units covered in all of his classes (2 Physical Science, 1 Algebra II, and 3 Contemporary Math classes) all have taken much longer than normal (these units were all in the regular curriculum). He had not used any TV, radio, or newspaper lessons because he thought these were not at a high enough level for his students and because he had already prepared special materials for his classes. He focused on students
helping each other during the SWS period by listing the names of all the A students, along with their phone numbers, for each class and encouraging other students in the class to consult "the experts". (Students seemed to respond well to this, he thought--many who had previously grumbled about their own low grades in his courses were surprised to learn that others had been getting A's, and the A students seemed to be pleased when they were asked to help out. Students told him that they did call each other about the math lessons.) He found kids eager to get back to work--the first week in the regular sessions, students were energetic, glad to get something to do, and much more well-behaved than usual, even when compared to after a regular vacation. Grades will be affected, he said, with more high and more low grades than usual, because he told students all the work done during SWS would be for extra credit. When asked if he would have done anything differently (in terms of materials used, or topics covered, or organization) he responded only that he wished he had not made the "extra credit" promise--that up to 25% of some students' grades would be extra credit.

Teacher 3 -- She was a TV teacher during SWS, working with a team of two other teachers on the geometry programs. Her team had complete freedom to cover whatever material they felt appropriate. They chose topics on the basis of: (1) What would be best served by a visual approach, (2) What was new for the students yet would be easy enough for them to work on by themselves, and (3) What was in the textbook, but beyond the material that students had covered so far in the semester. Geometric constructions and coordinate geometry were the topics chosen.
The geometry team sent each of the high schools a schedule of what would be covered in each of the geometry TV programs, but since school mail was not delivered regularly some schools did not receive the information. Many teachers learned about the content of the programs only by rumor.

Teacher 3 -- The teacher commended Channel 10 personnel for their excellent cooperation in giving the needed technical help, and praised the art teachers from the Columbus system who did all the art work and graphics that were required for the TV lessons. The video tapes that were made remain the property of Channel 10; evidently the Columbus system does not have enough money to purchase any of the tapes for the system's professional library.

While she was doing the TV lessons, her own classes were covered by a substitute teacher who was not a mathematics teacher. The major problem in SWS, she thought, was the downtown administration's fluctuating between optional and mandatory attendance policies for students.
SECOND OBSERVATIONS
School Without Schools Program
Secondary Math Education
by
Observer D

Follow-up Visits

Observations:

1. At both schools but especially at the high school classes seemed to be back in normal operation with a very business-like atmosphere prevailing.

2. In marked contrast to my visits during SWS, students in study halls, libraries, or learning centers were busily engaged in school work. There was very little of the "milling about in the halls" or general idleness observed in both schools during SWS.

3. The consensus of the teachers with whom I talked was that they were about two weeks behind with respect to content covered. Some felt they would be able to "catch-up". Others were somewhat concerned that the students' performance on standardized tests might be lower this Spring.

4. As during SWS, there were noticeable discrepancies in the teacher reports for the "good" classes and for the "slower" classes. Several felt that the experience may have been quite good for their better students in that it gave them a chance to "set their own pace" and "learn to work more independently as they may have to do in college". However, both the teachers and the students also indicated that there was considerable frustration from many of the students in being unable to maintain regular, almost daily contact with the teacher. With slower classes the feeling I received from both teachers and students was that not very much permanent learning (of mathematics at least) had taken
place during SWS. Both teachers and students in slower classes conveyed an impression of "didn't do anything much in mathematics" during SWS.

5. Some teachers, usually those of Consumer or Applied Mathematics at the high school level, indicated that their attendance was lower than before SWS. One expressed the opinion that some potential drop-outs may have used SWS as a motivation for making that decision early. Several teachers said that some of their students had not shown up since school resumed. In general, teachers felt that SWS may have contributed to greater irregularity in attendance patterns because of the habits students may have developed.

6. Some teachers and several students indicated that one of the more negative aspects of SWS was the rescheduling of their Spring vacation. They felt that a break in late February just could not replace the "warm weather" vacation.

7. In spite of some of the limitations expressed above, both teachers and students seemed glad to be back in school. They also felt that it was good that Columbus had initiated SWS instead of just taking an extended break. While the teachers felt they were two weeks behind now, they felt that without SWS they would have been much further behind.

8. Teachers indicated that restarting was much like starting school in September after a summer vacation -- or at least after an extended Christmas vacation. They felt that they had to re-establish classroom discipline and provide review lessons much as one would at the beginning of school. The junior high school teachers expressed more concern about the readjustment of students. While the high school students seemed to have "settled down" after a day or so, the junior high school students seemed more restless and to be giving the teachers
more difficulty in "getting them back to work"

9. Although students had been given assigned work they were theoretically expected to master during SWS, I found no teacher who had not reviewed extensively before testing students on such material. The results of tests given during the last week was varied but there was some indication that only highly motivated classes were close to expected achievement levels. In two geometry classes at the high school, for example, the "better" class averaged 14/20 in the first post SWS test and the slower class, 6/20. In the second instance over half the class failed the test. One teacher's solution to this problem was to give a "take-home" examination so the students could use their texts, notes, or other resources.
Summary Statements: The following statements reflect impressions of School Without Schools (S.W.S.) which are described in more detail in the narrative section of this report.

1. Attendance during School Without Schools was good in the 8 classes observed.

2. One of eight teachers interviewed incorporated media lessons in S.W.S. assignments. Three other teachers reported that some students voluntarily watched TV lessons or listened to the radio.

3. Participation in field trips arranged by four of the eight teachers interviewed was good.

4. Senior High teachers liked the flexibility permitted by S.W.S. for student-teacher contacts and interactions, for the daily school day, for field trip arrangements, and for individual student learning styles.

5. Parents of two classes of elementary students assumed some responsibility for more than one child, donating home space for class meetings, telephoning class meeting schedules and field trip information.

6. Classroom behavior patterns during S.W.S. and regular school were perceived by the observer to be pretty much the same. Student behavior, class management and teacher behavior did not appear different in the emergency situation from that observed once regular school had been resumed. In certain classes the same could be said for instructional activities and materials. The difference in the latter appeared to be "location". During School Without Schools kids carried out the same kinds of assignments they were used to but outside of the school. Differences in materials and
activities were reported by some teachers in the interview session, but were not part of the observable activities in the classrooms.

7. At the Senior and Junior High levels all the students in a class were responsible for the same assignments. Work done in class was the same activity for all. This principle held true for most elementary students but was more likely to involve class sub-groups of students. One exception was the class of third graders observed at Fair Avenue, to be involved in a variety of learning activities as a result of having a team of teachers assigned for the S.W.S. day in school.

8. The amount of planned or organized instructional activities carried out during School Without Schools varied greatly among teachers and also by schools. For example, one high school teacher had her day in school and was available to students by phone but did not arrange field trips or extra "class" meetings. The other high school teacher held office hours one day a week in addition to her day in school, was available by phone on all other week days, and arranged two field trips. Neither junior high teacher, with two regular class days in school each week and a third day on which they reported for special project help, had arranged field trips or additional class meeting hours.

One elementary teacher had good participation in field trips, some of which are best defined as environmental studies. A second teacher reported several field trips and two daily meetings with different groups of students for reading, math and social studies, while the third teacher used contractual assignments to cover material between "days-in-school". Another teacher met with her class at a Community Center location two days a week and arranged three field trips.
Overview

Information in this report was obtained by observations in eight Columbus School classrooms and interviews with the teachers of the classes. The observations were accomplished during the third week of School Without Schools, February 22-24, 1977 and during the second week following the return to regular school, March 15-17, 1977.

Two high school classes, two junior high classes and four elementary classes were visited in the efforts of this observer "to have a look" at math and social studies, including science instruction in grades kindergarten through twelve. With one exception, observation time in each class was determined by the length of the class period - approximately 50 minutes for secondary level classes and 15-30 minutes at the elementary level depending on teachers' management of time.

Classroom activities were viewed from a perspective based generally on the Crosswhite observation guide. More specific details are included where certain activities, materials or interactions created strong impressions in the observer about methods of instruction - in other words, shed more light on what the teacher and the kids were actually doing all day in school.

The teacher interviews provided an opportunity for the observer to pose directly certain of the issues and questions raised by the researchers. Interviews were based on the amount of time teachers were willing to take to talk, often determined by class schedules. Duration of the interviews was a few minutes to 25 minutes.

Findings

High School

At North High School a twelfth grade psychology teacher and an eleventh grade American Studies teacher were interviewed. Both classrooms were visited when regular school was resumed; the latter was observed during School Without Schools.
Eleventh-grade American Studies

American Studies is a course planned co-operatively by the English and Social Studies Departments at North to co-ordinate instruction of the two content areas.

Twenty-two students attended class on the S.W.S. day in school and twenty-five on the regular school (RS) day. The percentages of time taken for various activities on both days are as follows:

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<thead>
<tr>
<th></th>
<th>S.W.S.</th>
<th>R.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking attendance</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Returning assignments</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Collecting assignments</td>
<td>20</td>
<td>5</td>
</tr>
<tr>
<td>Clarifying assignments</td>
<td>25</td>
<td></td>
</tr>
<tr>
<td>Making assignments</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Lecturing</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Discussion</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Asking questions</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Answering questions</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Testing</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Disciplining</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Other (see text)</td>
<td>75</td>
<td></td>
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</tbody>
</table>

The first several minutes of the S.W.S. class period were used by the teacher to tell students where and when she could be contacted in the school building on the following day and to give directions for an all-day field trip scheduled for the coming Saturday. Lecturing and discussion during the S.W.S. observation occurred extemporaneously in response to student reporting on various American Revolutionary personalities (categorized above as collecting assignments).

On the regular school day most of the class period (75%) was used by students to copy notes which the teacher had written on the chalkboard before the class began. Three students took make-up tests during the period and the teacher sat at her desk glancing around the room, making non-task related comments.

Two field trips were planned by the teacher for S.W.S. An all-day trip to Adena which was planned for an April date during Spring break.
had been rescheduled to occur on a Saturday during the period of S.W.S. A field trip to the O.S.U. Black Studies Hall of Fame attended by 52 out of 76 American Studies students was considered a great success by the teacher.

There were comments from this teacher which speak to certain of the issues posed by the researchers. She reported feeling greatly pressured about writing 30 lesson plans within a two day period in preparation for School Without Schools. She was concerned about grading and "unfinished business" from interrupted learning activities.

The flexibility of scheduling, of student contacts, of pacing learning according to student needs and abilities had "positive relaxing affects" on her. She would like to have a day a week under normal conditions when her students could work on topics of individual interest without the restraints of the 9-periods-a-day schedule. For herself, one week at the end of each semester free of the daily schedule would provide a reasonable amount of time for course planning and preparation. She was especially pleased with student-teacher interactions during S.W.S. Flexibility in scheduling had increased one-to-one contacts with students and had improved the quality of the interaction because of time and opportunity to relate as individuals.

Twelfth-grade Psychology

The twelfth grade psychology students were leaving class, two at a time, for several minutes on the regular school day visit. They were being measured for caps and gowns.

During the time they were in class they copied notes which the teacher was writing, a few paragraphs ahead of them on the chalkboard. Some questions for the teacher as well as informal conversation among students occurred, however, the class appeared task oriented and businesslike in a
comfortable environment (as compared to the American Studies group who had "a sting" to their bantering and an attitude of non-interest toward content during both observations).

All twenty students in this class had completed four S.W.S. assignments:

a) to read a biography or autobiography about a person undergoing change (ex. Dibs, Black Rage),

b) to read a book that explains a theory of psychological change.

c) to keep a diary of your own attitudes, emotions, frustrations during S.W.S.

d) to answer questions on the study handout.

These assignments for out of school time had been planned to cover academic aspects of the course while the days-in-school during S.W.S. were given to activities which provided for "experiencing" the concepts studied. The teacher expressed great satisfaction in the work done by students to complete the 4 assignments. However, she thought class participation was hindered when inadequate time for "lead-in activities" as well as less time spent together as a group created threat in the the "experience" situation. The teacher had not been able to follow "her sequence of concept introduction" either, out of the necessity to alter the course content and eliminate some of the activities. She did not expect to have time to make-up the material, saying that S.W.S. limited the course content to fundamental concepts. She based her premise that her students were learning on the completion of the home assignments (100%), on the number of telephone contacts and the specificity of problems or questions she received from students, and on student comments on in-school days such as "I haven't thought of this before", or "This is new to me", or "Now I know why I'm learning this".

During S.W.S. the psychology teacher liked the willingness of the students to call her for advice about their work, she felt more relaxed
in preparing for less class time and as a result thought that her preparations, as well as her evaluation activities had been improved. She thinks that three days a week in school and two days for out-of-class, out-of-the building away from the 9-period a day schedule, would enhance the "pursuit of learning" for students and their teachers and should be considered for regular school.

**Junior High**

A seventh grade class in World Geography and an eighth grade class in American History were visited at Indianola Junior High, a building that was a host school only two days a week. During S.W.S., Indianola classes were held on the regular schedule two days a week. On the third day the building was open to students, with teachers available, for work on special projects or physical education. All field trips were to be scheduled as well on the third day.

**Seventh-grade World Geography**

Two seventh grade students were absent from the World Geography class in the S.W.S. observation period; all 25 were present in the second observation when school was back in regular session. Activities which focused on a unit of study on the USSR during both observations were as follows:

<table>
<thead>
<tr>
<th>Activity</th>
<th>S.W.S.</th>
<th>R.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taking attendance</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Clarifying assignments</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Making assignments</td>
<td>65</td>
<td>60</td>
</tr>
<tr>
<td>Discussion</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Laboratory (Work period)</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Asking questions</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Answering questions</td>
<td>20</td>
<td>10</td>
</tr>
</tbody>
</table>

The observer arrived a bit late for both sessions but assumed a percentage of time for attendance since the teacher knew, when asked, how many students were missing. The class proceeded smoothly as students
got busy on individual map-drawing activities after the unit on Russia was announced and the map assignment explained. The teacher circulated during this working period responding to individuals with advice or suggestions to those who asked for help and with reinforcing comments to others. Neither she nor the students did a lot of talking but there was some informal conversation among student-teacher and student-student groups during the work (laboratory) period.

The work period during the second observation was used for reading and note taking activity but was preceded by a period of discussion during which Russian political concepts were explored. The reading, again done by the entire class, was George Orwell's Animal Farm, assigned for the purpose of reviewing and criticising concepts, associated with communism. The teacher went about the room speaking to individuals when signaled by raised hands. At both observation sessions these seventh graders appeared to take the class seriously and to be involved in doing assignments.

A brief interview with this teacher was the source of information for the Indianola Plan for School Without Schools (see above).

Eighth-grade American History

Five of eighteen students were absent from American History class on the S.W.S. day of observation, four were absent on the "regular day". Attendance was not officially taken and the teacher had to look at his roll book to respond to the observer's question about attendance. Students were still arriving fifteen minutes after the scheduled beginning of the period. As each arrived the teacher re-iterated the task for the day which was to copy notes written on the chalkboard. There was "bantering" back and forth among students and between the teacher and individual students during the whole class period. The word "bantering" includes playful, complaining and grumbling, sarcastic and needling exchanges. The teacher did not seem to approve much of the student chatter but did
as much talking of a non-task variety as anyone. Class eventually appeared to be underway when most of the students began note-taking and the teacher started conferring at his desk with certain individuals regarding assignments he was returning to them. Several students identified mistakes in the notes which had been written on chalkboard by a student. The teacher explained to the observer that they took turns "putting up" the notes for him.

The teacher indicated in a brief interview session that the class was "proceeding pretty much as usual, although they couldn't do everything they usually do". He was "giving more homework" in an effort to cover everything. Discussion time was cut short, however, and he preferred to have a class period for talking about the "notes" before testing students on the material given in them.

Sample Notes
1. England was the first industrial nation in the world.
6. Most of the workers on the Union Pacific were Irish and most of the workers on the Central Pacific were Chinese.
10. To be part owner of a corporation you must buy a share of stock.

Elementary

Four elementary classes were observed in two different elementary schools. One class of Fair Avenue third graders was visited in their host school, Kingswood, and then in their own building. The other three classes were Gables fourth, fifth and sixth grade students in their own building.

Third Grade Math and Language Arts

The White observation guide didn't work well in the third grade classroom of Fair Avenue students at Kingswood. Four adults working in the room among 23 children included the regular teacher, a language specialist assigned during S.W.S. to the third grade classes, a tutor, and a reading clinician. The morning block of time in this room was given
to language arts while in another room a group of 18 third graders was meeting with another third grade teacher to practice math skills. The two third grade teachers and the language specialist were teaming very satisfactorily, they thought, during S.W.S.

Individual students, groups of students and teachers had mobility but the grouping patterns during the 30-minute observation period included several student-student groups of 2 or 3, a (1) student - (1) tutor group, and a group of (3) students and a teacher. One teacher went about the room joining the small student groups or answering questions of individual students seeking her out. Informal conversation carried on by students and teachers alike broke out at times although without a noisy or disruptive effect. No disciplinary actions occurred during the observation period. Work in the room related to language curriculum, although one small student group was using math flash cards. Writing activities in some of the student groups were focused on students' ideas about how they would behave in adult roles, i.e., parent, worker, friend.

The return to this class two weeks into the regular school session created a similar impression in the observer. There were 23 children in class, but only one adult this visit. The variety of group size and activity was again noticeable. The morning was given to completing work in language arts and math with the teacher giving attention to one group of children while the remainder of the class worked on assignments:

1 Boy at typewriter - involved - spelling words
6 Children with teacher gathered around a table working on spelling
1 Boy working on papers at a table off to the side of the room
2 Boys at small work table
Remainder of the class at work at 3 tables along blackboard wall

Different spelling, math, language and writing assignments were listed on the chalkboard for several groups. Materials being used around the class included spelling texts, math cards and notebooks, lined paper and picture dictionaries.

The teacher felt that S.U.S. schools "had gone pretty well considering..."
Intermediates, Third - Sixth Math, Social Studies, Science

Three teachers of third, fourth, fifth and sixth level students at Gables Elementary School were observed and interviewed. Gables is an open space facility and each teacher has in the intermediate area a home base group which includes students at two grade level age ranges, i.e., 3-4, 4-5, 5-6. Each teacher has instructional responsibility to groups of students drawn from the whole intermediate area for math. This arrangement is employed occasionally for social studies-science units, as well.

In the first class observed some students were working at tables while a group of 3-4-5 level students seated on carpet mats near the chalkboard received instruction in metric measurement from the teacher. Each had a textbook and following the teacher's explanation and a question period, they went to tables to work on the assignment given in math. Other work for their day in school was listed on the chalkboard and included science and social studies assignments of the "read-the-text-and-answer-the-questions" variety. During the work period which involved all the children located at this teacher's home base, she circulated from table to table in response to individual student signals or to check with others on certain assignments that were due.

A scene very similar to the one described above was observed on the return visit when regular school had resumed. A total of 26 children were grouped at tables at the teacher's home base. Most students were reading library or "recreational" books while a few worked with health and math books. Individual students conferred with the teacher, who took time out from drawing geometric figures on the chalkboard, to talk with them. When this was finished she asked 4th level students (15 students) to come up with their carpet mats and math workbooks to the chalkboard area. Explanation, discussion, questions and assignments regarding the geometrical figures followed in that order.
Several S.W.S. field trips in which all students participated were arranged by this teacher, with transportation handled by parents. The teacher thought each of the trips had been extremely worthwhile, adding that she would not have taken on the amount of planning required for so many trips under normal circumstances. They went to:

a) The Seventeenth Avenue Library (Col. Schs. Main Library) where each student checked out 5 books.

b) The Ohio Historical Society where they attended the movie and lab class on natural science, visited the "Village" and took in the pioneer life exhibits and the "old bones" (Indian exhibits).

c) The School For the Blind where they saw how blind persons "go to school" as well as a movie entitled "What Do You Say When You See The Blind?".

d) State House Tour which included an interview with the State Auditor and a tour of the rotunda.

In addition to field trips and the day-in-school the teacher had followed a schedule for class meetings with students on every other day of the week. Wednesdays were devoted to reading with all her students scheduled for lessons some time during the day. Math groups met at various homes Monday mornings and at Gables from 2:30 - 4:00 P.M. on Tuesdays, as soon as the visiting students were dismissed. Two Social Studies groups convened Tuesday and Friday mornings respectively.

The teacher is quoted in regard to the setting described above and the students' learning, "I got so much done with just being responsible to one group of children at a time - with no bells, no clocks, no other groups."

"I felt they really learned. I was amazed by the independent study skills they have. Many of them had ideas of their own that they went ahead on, or they did extra things like watching the media lessons. The fifth graders were most likely to go ahead, and I think they learned more than they normally would."
"We felt a sense of urgency and wanted to accomplish as much as we could."

"Kids sure found out that the world can change."

"I think we'll - teachers, kids, parents - be glad when it's over."

Intermediate, Third - Sixth Math, Social Studies, Science

A second class of intermediate level pupils at Gables was in a group meeting with the teacher to determine which S.W.S. assignments had been turned in so far. She was naming children whose Social Studies assignments had been received and graded according to contract terms. Frequent discussion between teacher and individuals interrupted this session. Once the "finished" students were identified, those whose work had not been accounted for were questioned, "Paul, where's Paul? - We have to have a talk, Paul". Group laughter.

"Tiffany, have you done any social studies?" "I didn't have a book at home."

"I need the third assignment from Kevin". Kevin starts crying silently.

"Ed, looks like I have only one assignment from you".

"What is it Tiffany"? "I've got some stuff in my notebook," from Tiffany.

Kevin's friends reassure him by telling him the teacher hasn't gotten around yet today to looking at the "papers in the tray". Etc.

Children were praised for their knowledgeable contributions to the social studies discussion held that morning based on their home preparations. The meeting then ended with reminders that next week would be Spring Vacation.

When asked how she would have handled social studies under normal conditions, this teacher replied that she would not have taken a "straight teaching" approach, (explained as textbook reading to do assignment sheets)
as she had done for home work during S.W.S. The unit in progress during S.W.S. would have been co-operatively planned and carried out by her and another intermediate teacher without using the text which they consider inadequate. The team effort had been ditched, but the teacher thought her students had responded well to the independent student assignment used instead to accommodate S.W.S. She had distributed among the students along with straight text assignments "some four boxes of books from the main library resource center which fit the Colonial Period they were studying." Students' reporting on the books they read indicated that "they had caught the flavor of the times." She said she would have started out the unit if done at school with the Brunner map, going from there into independent activities, with no "straight teaching".

Her comment about the effect of S.W.S. on her students was that they were still asking after three weeks of S.W.S., "When is vacation?" Her meaning was that S.W.S. was like "vacation" to them.

Intermediate, Third - Sixth Math, Social Studies, Science

The third group of intermediate students at Gables were discussing the details of a Camp Trip planned for the week following the S.W.S. Spring Vacation. This trip was being planned with two professors and thirteen students of Natural Resources from OSU. Activities for Gables students would focus on crafts and sciences of pioneer life such as weaving, baking, preparing meals including beverages from foods available through the natural environment, on nature and animal studies and the planting of a "school forest" of about 600 seedlings. The class had raised funds for the trip by opening a school store in which student-made products (food and crafts) were sold three days a week during regular school. (This had necessitated student banking and accounting as well.) This teacher thought that the quality of learning resulting from such
activities wasn’t occurring in the S.W.S. “read-do” variety of assignments. Learning was affected because of the difficulty in follow-up on "questions kids have" and because of their inability to budget time. Some work was done badly, and other work didn’t get done at all. The weekly day in school was not typical because the time was spent collecting and checking assignments and in testing learning. A great deal of time was given on the day in school to discussing the problems that showed up in the homework turned in.

A variety of field trips had been arranged by this teacher, for total class or interest group participation. He said that all of these were possible because of S.W.S. He could not have done nearly so much tripping during regular school. He was especially satisfied with the preparation for the upcoming Camp Trip he was able to provide his students through the extensive use of field trips.

Most (3/4) of the class had shown up to see the Natural Environment Exhibit and the Planitarium at COSI, OSU’s "Ohio Wild Flowers and Trees" Display and the Bird Refuge at Blendon Woods Pond. Groups of 13 each had attended COSI workshops in "Weather", "Optical Illusions", "Ufos and Extraterrestrial Beams", and the Environmental and Planitarium Laboratories, all of which charged participation fees. A group of five students paid to participate also in Blacklick Woods’ Nature Workshop. The students had attended 3 four-hour evening sessions and were planning a report to their classmates.
Observations
by
Margaret Wehner

Introduction

My observation of the secondary science area focused on science teacher perceptions rather than classroom observations. Although, I did observe 2 ninth grade general science classes and 1 tenth grade life science class during the half day I was in each school. In addition to seven science teachers, three building principals were also interviewed. These opinions and perceptions were determined by responses to the following questions:

2. What resources have been made available to you? How did you use TV programs?
3. Did you try some new teaching methods or strategies that you plan to use when you get back to your regular schedule?
4. How did you provide for laboratory activity by students?
5. Did you attempt to expose the students to new materials and concepts or did you use this time to reinforce and review what had been previously covered?
6. If you had it to do all over again how would you change the way you handled this situation?

This report is divided into three sections.

I. School by school results which include the following:
   - A brief description of the school
   - Classroom observations during SWS and after school resumed
   - Class teacher interviews during SWS and comments after school resumed
   - Other science teacher interviews
II. Principal interviews during SWS and their perceptions after school resumed

III. Summary

The first high school visited had an enrollment of 1651 students of which about 2% were from low income families. (Low income was determined by the percent of families in the attendance area receiving money from Aid to Dependent Children.) This high school served as a host school with their students meeting each Tuesday during School Without Schools (SWS).

Classroom Observation

I observed a tenth grade life science class which was modified biology. Eighteen students were present. The students tended not to be too attentive. There were frequent requests at the beginning of the period to go to lockers, etc., all of which were flatly refused by the teacher.

The teacher divided the class into 4 groups and appointed a captain for each group. She then read a short article about carotenemia to the class, and wrote five questions on the board concerning the article. Each group was to work together to answer the questions and the captain turned in the group response. Only about one or two students in each group actively participated in the task. The others were somewhat passive and/or made non-relevant remarks. When all teams completed the task the teacher went over the answers with the class.

The remaining class time was spent clarifying homework assignments. Each student was responsible for making a scrapbook of newspaper articles concerning one of the following subjects, energy, drugs, or pollution.
On the return visit there were 28 students present. During the first half of the class time about 10 students were taking a make-up test. The remainder of the class worked on an in class assignment—writing answers to questions from the textbook. The teacher made many classroom management statements during this time. Students did not appear too interested, and there was frequent talking out in class by students.

During the last part of the class the teacher returned homework, passed back test papers and discussed test results with the class. Selected students were called upon to read the questions and give the answers. According to the teacher there were a lot of discipline problems in this class. I was excused the last few minutes of the period so the teacher could talk privately with the class about their behavior.

Classroom Teacher Interview (See questions on page one of this report)

1. This teacher felt SWS program was a good idea—"kept kids in touch with the basics."

2. She felt the resources were adequate. TV programs were assigned although thought to be better for elementary than secondary students. Took a field trip to Ohio State University. Most students don't think they have to be here, so most won't attend field trips which are scheduled on a day other than the assigned SWS day.

3. She didn't try any new teaching methods or strategies but did set up a telephone tree for communicating with her students. Classes were organized into teams with captains who could call the teacher during school hours only to relay only questions or concerns from the other students.

4. Did not give lab work.

5. The majority of time was devoted to reinforce what had been previously covered. However, some new materials were provided.

6. If she had it to do over, she would plan more field trips.
Teacher Comments After Return to Regular School

At the follow up visit this teacher stated students had been tested since their return and performed about the same as always which was generally poor.

The teacher noted students from other classes who did homework and attended the 3 days did better on the test.

Students had time to gather more indepth information for notebooks on drugs or pollution than they would have had.

Students revealed greater knowledge and understanding of these subjects (drugs and pollution) during discussion but not on testing.

She had an opportunity to identify students who were interested and did assignments.

Other Science Teacher Opinions

I was able to interview three other Biology teachers concerning SWS. The following were their responses to the questions and their comments after school resumed:

Teacher A Interview

1. This teacher felt SWS at least kept communication open with kids - "hopefully some learning going on." Based on work collected there was an effort by some students to prepare and complete assignments. Attendance was reported very good - normal and above - until today (the last day) and it was less than normal.

2. I didn't assign TV for Biology classes but did assign to my social studies classes. Received notification ahead of time about the program content for social studies. There was no advance knowledge of content for Biology programs.
3. Basically assigned readings and asked specific questions because there wasn't time to discuss topics in class.

4. No lab work given.

5. Assigned mostly new material. If no questions were asked about homework, then I went on to the next topic.

6. Don't know what I would change under the circumstances. Overall, for situation it went pretty smooth. Everyone was apprehensive at first but it was all well organized and had cooperation from administration. There was a lot of enthusiasm first two weeks - "kind of bottomed out now - everyone let down."

**Teacher Comments After Return to Regular School**

- Generally test grades were one step lower.
- Gradual decline in quality of work by students, i.e., A and B papers were C by third week.
- Realize my students need more structure—meeting once a week was not enough.
- May try project or independent study approach for history class - don't see it for science.
- Some teachers felt they didn't have enough grades for a 6 week letter grade and wanted to go with a pass-fail. (I have more grades than normal). Some students felt this was a "cop out" on the part of teachers. Students said they wouldn't have done all that work if it was going to be a pass-fail.
- Felt SWS more difficult for science and math than social studies because one unit builds on another, especially in math.

**Teacher B Interview**

1. "Think SWS is horrible - frightful way. Not much learning going on." Don't like to go too far because of kids that aren't here. First week attendance was better than now (3rd week).
2. Would want more field trips, more supplementary materials and utilize library more. Didn't assign TV science - had already covered the material. Problem with TV programs - students can't ask questions and can't discuss. "Miss meat, of education when you can't discuss." Basically think putting on a show for the public, which was the only advantage of SWS.

3. Didn't try new teaching methods.

4. No lab experiences provided, do very little anyhow. Usually do frog dissection in spring.

5. Provided mostly new materials.

6. If had it to do over would make better use of field trips and utilize the library more.

Teacher Comments After Return to Regular School:

- Gave list of questions from two chapters discussed during SWS. Discussed first two days back and gave quiz third day. Results were worse than ever except for 8th period class which was outstanding.
- Felt poor results were because:
  - tough material in these chapters
  - too much time had passed
  - didn't cover material in the usual manner.
- Would like to see field trips worked into regular curriculum. Take a week and arrange field trips for whole school. Work in cooperation with other teachers and combine several classes together.

Teacher C Interview

1. "SWS was better than nothing." Relatively ineffective - too much time in between. Got to take a lot of field trips that was good. Attendance was normal during SWS.

2. A good job was done providing community resources.

3. The only new strategy I've used was two way communication with students with a telephone tree.

4. Provided no lab activity.

5. Gave regular assignments up through March 18th, no assignments due until second day back.
6. If had it to do over would require assignments weekly. Students were putting off doing assignments.

Teacher Comments After Return to Regular School

- Tested students second day back. They did poorly even though they knew there would be a test. Students who had done assignments did well on the test.
- See possibility of incorporating field trips into regular scheduling using key subject areas.
- Felt that field trips should not be required because of those students not interested. Let students sign up for field trips. Current limitations of field trips were:
  - time of day and limited amount of time that can be spent
  - students miss other classes
  - inconvenience to other teachers
  - logistics of putting it together
  - limited availability of buses. Need buses allocated just for field trips.
- Students needed more structure within a block of time.
- Curriculum needs constant explanation and clarification -therefore difficult during SWS.
- Felt teachers lost their teaching momentum. They needed more time with kids.

The second school visited had an enrollment of 1351 students with about 2% from low income families. During the SWS they met each Wednesday at a host school.

Classroom Observation

A student teacher conducted this ninth grade General Science class. He gave an interesting slide presentation about bats. Each slide was explained and questions posed by students were answered. The student teacher seemed very knowledgeable about the subject. Students seemed
very interested and attentive for the most part, though the student teacher had to interrupt his presentation several times to discipline individual students. The regular teacher indicated these students were more "hyper" than usual because of the new location.

On the return visit the class was taking a test. A substitute teacher was in the class. The test was on an investigation and balancing equations. This test covered work completed since the return to regular school.

Class Teacher Interview

This interview was with the regular classroom teacher. I was unable to interview the student teacher.

1. The teacher felt school was very difficult for one day a week. "Really just holding. is disastrous." Class attendance was reported to be above normal the first two weeks and about normal the third week.

2. "Resources were super - library and A.V. materials. Host school made us feel at home." TV science good. But only on every other day. Did not assign for my students.

3. The student teacher was conducting all the classes.

4. Couldn't provide lab experiences being in another school. It would be necessary to transport equipment.

5. Provided students with new material not the regular curriculum but enrichment materials. Planned 3 one day units with a related field trip. One class period was spent identifying tree twigs in winter condition, and was followed by a field
trip to Blendon Woods. The other two units were about sea snakes and bats. A trip to the zoo was to conclude those units.

6. "Pleased with results — I used high level interest materials."

Ninth grade is the first introduction to science for students. Junior high level good age to "hook kids" but should start out with life science, that is living things. I plan to incorporate a living things unit in my science program.

Teacher Comments After Return to Regular School

While this teacher was not present during the follow-up observation I was able to talk with the teacher a few days later.

- The teacher reported 85-90 percent of students did work assigned during SWS but it was graded. Kids enjoyed field trips — 55 (out of 180) went to the zoo on next to last day of SWS.
- Saw no difference in performance — after first couple of days settled in like they had never been away.
- Spent about two days "catch up time."
- Had a small group of students who usually do C to B work really take hold and do better than usual and get A's.
- Will definitely incorporate animal unit and expand it. Kids reported they liked this unit.
- Students reported they didn't mind doing homework at home but missed the kids and seeing their friends.
- Poor students loved being away, however did have some who realized they needed school every day.

During the follow up visit I was able to talk with another science teacher while the class was taking a test on the metric system. Their homework assignment during School Without Schools was to make a notebook about the metric system.
This teacher reported disappointment with the quality of work from students. There should be more help and support from parents in completing homework assignments. He reported an instance where a parent refused to purchase a metric ruler for his child to use in completing SWS assignment.

The third school had an enrollment of 791 students, of which approximately 10% were from low income families.

In addition to their regularly scheduled day at the high school, teachers met with students two additional days each week. The staff was divided into two teams for each grade level. The extra class sessions were held at sites other than the school. No observations were made at these class sessions.

Classroom Observation

During the SWS observation the main activity was a discussion of individual student projects. One student was making a scrapbook on weather. The teacher asked questions on what information had been collected, pointed out different sources where additional information on weather was available. For the remaining 10 minutes of the period there was a lively discussion in response to the question "Is there a gas shortage and energy crisis?" Students expressed personal opinions and the teacher seemed to be leading the class to explore both sides of a situation as well as to differentiate between fact and opinion. The teacher attempted to involve all eleven students present.

On the return visit, results of a test on simple machines were returned to students. The entire period was devoted to discussing each question and the correct answer. This test covered material covered since the return to school on March 7.
There was no testing over SWS homework assignments. All students who agreed to complete the 24 homework assignments, handouts on energy received a grade of C for the six weeks. Students wanting a higher grade agreed to write a research paper on an energy related subject.

Class Teacher Interview

1. This teacher felt the school without schools program was a statement that education was important. It provided the opportunity to rise to an uncomfortable situation. It had provided a chance to see kids outside of the structure and on a more informal basis.

2. "The greatest resource is our own ability to adjust." He stated TV was not helpful to him, as he met two other days in addition to the assigned day at the host school. He felt the TV science programs should have been about energy.

3. Putting the bulk of responsibility on the student for assignments was a different teaching method. After regular school starts I plan to provide opportunities for students to assume responsibility for certain types of assignments but would also include testing.

4. No laboratory activity was provided. Feel lab is where they are.

5. All materials were new. I inserted a whole new unit on energy.

6. Don't know what I would do differently—would want to do a better job.

Comments by This Teacher After School Resumed

"Students did more on their own than I anticipated."
"Students don't have enough opportunities to do research type papers. They have difficulty expressing ideas. Honors class enjoyed "digging out" information. Most kids seem to want to be told what to do."

"Day to day contact much to be preferred."

"Glad to be back."

Principal Comments and Perceptions During School Without Schools

Benefits

"The best possible thing could have done. It was brilliant idea in a crisis situation."

Public has an opportunity to see some excellent teaching (TV).

Teachers meeting and working with business people.

Staff learned to know each other better and have more "esprit de corps".

Parents volunteered who hadn't previously - going on field trips, etc.

Collassial cooperation with community recreation center.

Provided a city-wide opportunity for community participation with Columbus Public Schools.

Teachers will get the most out of SWS

Gave kids more independence.

Guidance took on scheduling for next year - 2/3 of students seen and scheduled.

Kids never realized how much work they were really doing.

Disadvantages

Education not revered item in my neighborhood - gave lots of kids another vacation. Some of the teachers took some days off.

At mercy of professionalism of your staff - no way to be accountable.

Went down hill 3rd week.

SWS attendance not required.
All the uncertainty since December 17th - snow days, fuel days - close school - keep the school open - then school without schools.

Short time to prepare materials and plan.

Principal Comments After Regular School Resumed

Strengths

PR with community.

Teachers meeting with students in other sites including homes enabled teachers and parents to know each other.

Subtle implication of the importance of education because of effort put forth by school system.

Think community pleased - think an operating levy could have won easily if on ballot at end of SWS.

Teachers benefited by realizing regular routine isn't as rough as they thought.

According to reports from parents a lot more kids watched TV than was expected.

Field trips most successful when planned by teachers.

Only expected about 30-40% of students to attend but attendance excellent almost as good as regular school

There were benefits to students who followed through and did assignments.

SWS met kids social need "keeping in touch" once a week.

Problems/Disadvantages

Too few kids took advantage of TV.

The higher the grade level the less TV was applicable.

Have a lot more truancy than ever had for this school at this time of year.

Increased activity and discipline.

Lack of specific instruction.

Educational TV problem without talent professional people to present.

Art teacher reported couldn't find any students who had watched TV.

Made people - teachers, students and administrators - somewhat complacent.
Lack of specific instruction related to particular subject(s).

Many teachers felt didn't have enough information from students to give a letter grade on report card for grading period.

**Recommendations/Suggestions from Principals**

- Should have education programs on all three TV channels instead of those Saturday cartoons; provide greater amount of education.
- Provide independent study experiences for junior and senior high students.
- Week of field trips for whole school worth pursuing.
- School system should consider allocating buses just for field trips.

**Summary**

- All but one person interviewed felt SWS was a good idea. At least kept kids in touch with the basics.
- The most frequently mentioned problem was not seeing kids often enough.
- Generally class attendance was at or above normal the first week and declined to slightly below normal by the third week.
- Resources were reported quite adequate by teachers with all but one using the field trip opportunities.
- Community cooperation and involvement were reported outstanding.
- TV science programs were not assigned except for enrichment and/or extra credit activity. Teachers felt programs were too general or material had already been covered.
- Most teachers did not attempt any new teaching methods or strategies. Two teachers are planning to provide more opportunities for independent study for their students. One teacher is planning to incorporate an expanded animal unit in the general science course.
- No laboratory activities were provided.
- Most teachers provided new materials either in form of enrichment materials or regular assignments.
- If they had it to do over teachers indicated they would make more use of field trips.
Four of the seven science teachers interviewed tested students over the SWS homework assignment during the first week of regular school. Results were reported to be poorer than usual. Students who completed assignments performed better on the test.

Principals indicated SWS was good idea and very positive for the community.

My personal impression from observations and interviews was students were overwhelmed by the volume of assignments and didn't know how to deal with them. This crisis seemed to point up a great need for providing students with more opportunities earlier in their schooling to independently manage their assignments and responsibilities more often.
B. Site Visitation Team Reports

A team of specialists in education was created during the first week of the study to observe and record activities and issues outside the classroom related to the School Without Schools Program. Although team members were not restrained from recording their observations of any aspect of the program, they were given direction on areas to emphasize during their time at the site based on their specialty. The credentials of the team members and their assignments were as follows:

George Mallinson (science education during School Without Schools)—Dr. Mallinson is a former Dean of the Graduate School and is presently Distinguished Professor of Education at Western Michigan University. A former science teacher and recognized leader in science education, he was well equipped to observe the science education program in Columbus during the School Without Schools.

Charles Warfield (administration, school board, and minority group perspectives of School Without Schools)—Dr. Warfield is Associate Professor of Educational Leadership and Director of the Para School Learning Center at Western Michigan University. As president of the School Board and a member of the black community in Kalamazoo, Michigan, Dr. Warfield was aware of the issues that similar groups in Columbus might be concerned with during School Without Schools.

Richard Munsterman (administration, cost and legal/political aspects of School Without Schools)—Dr. Munsterman is Associate Professor of Educational Leadership at Western Michigan University and a specialist in school management and finance. His background in school business management and planning represented an important administrative perspective of the School Without Schools program.

Donald Weaver (coordination and use of community resources during School Without Schools)—Dr. Weaver is Professor of Educational Leadership and Director of the Community School Development Center at Western Michigan University. As a specialist and national leader in community education, Dr. Weaver was well equipped to analyze the School Without Schools program from a community education point of view.
With the exception of Dr. Mallinson, each team member was at the site during the week of February 21, the last week of the School Without Schools Program. Dr. Mallinson was at the site during the week of February 21 and returned on March 18 to observe the Columbus Public Schools back in regular session. Their reports follow.
School Without Schools
Site Visitation Report
by
George G. Mallinson

Introduction

The researcher presenting this report visited the "Schools Without Schools" Program of the Columbus Public Schools, Columbus, Ohio on February 21, 22, and 25, 1977 during the implementation of the Program; and made a "retrospective" visit on Friday, March 18, 1977. The inquiries made during the first three visits emphasized, "What is going on?" and, "How well do you think it is going?" On the "retrospective" visit the inquiries emphasized, "As you look back, what do you think was accomplished (or not accomplished)?" The persons and "agencies" contacted by the Evaluator preparing this report appear in the Appendix. No effort will be made to chronicle the various discussions. Rather, some of the key points that emerged from the interviews will be summarized and generalizations (hopefully correct) about the observations will be made.

The Background

The "Schools Without Schools" Program of the Columbus Public Schools, Columbus, Ohio that extended from February 7, 1977 to, for all practical purposes March 7, 1977, (holiday February 28 - March 4) was a reaction to a crisis to which the school system was not prepared to respond adequately. During the middle of the week of January 17-21, 1977 the Administration became aware that it might be necessary to close the schools because Columbia Gas of Ohio, Inc. that supplied the school system with natural gas for fuel no longer had sufficient reserves to accommodate the schools. Thus, the schools were to be cut off from a fuel supply. The last days of "regular school" were Thursday, January 27, 1977 and Friday, January 28, 1977.
However, attendance since the schools opened after the Christmas Holiday recess had been sporadic because of inordinately cold weather and heavy snow. The "emergency days" had been exhausted and it is difficult to suggest that any systematic effort had been initiated internally to come up with solutions if the schools closed for a lengthy period.

Conversations with a number of persons elicited contradictory information but it does appear that the motivation for the "Schools Without Schools" Program came from Mike Jurgeson of WBNS Radio of Columbus, Ohio who suggested the use of various communications media to broadcast and televise educational material so students could learn at home. It is also claimed, and the claim seems to be true, that after he contacted the Superintendent of Schools of Columbus, Ohio, Dr. John Ellis about the possibility, he also contacted Mr. DiAngelo the Station Manager of WBNS-TV Channel 10 who agreed to cooperate and provide "prime time" for educational broadcasts.

Suffice to say, on January 28, 1977 the President Pro Tempore of the Ohio Senate and the Speaker of the Ohio House of Representatives issued a statement proposing "to authorize through temporary legislation, and...additional fifteen (15) days to the schedule of closures for response to energy shortage." This legislation was later passed. On February 1, 1977 the Columbus Board of Education, acting on the assumption that such legislation would be passed, closed the Columbus Public Schools effective February 4, 1977 through February 25, 1977. It was also agreed to operate the "Schools Without Schools" Program. Initially, radio time was provided gratis by WBNS radio from 10:00 a.m. - 2:00 p.m., and by WBNS-TV from 7:30 a.m. - 11:30 a.m. Another radio station, WCBE (90.5 FM), and three other television stations, WCMH-TV Channel 4; WTWN-TV Channel 6; and WOSU-TV Channel 34 joined the effort.

There is no need to document here the various elements of programming since they appear in the newspapers of Columbus, Ohio. Also, the intentions
for the enterprise are described in "Handbook for Schools Without Schools." Columbus Public Schools, Columbus, Ohio, February 2, 1977. It is evident, however, that the Columbus community including the public and non-public schools, newsmedia and organizations too numerous to mention marshalled their efforts to "make a go" of the enterprise. But, there was little time to make the transition. The "Schools Without Schools" effort was to run three weeks from Monday, February 7, 1977 to Friday, February 25, 1977 followed by a one week recess. This left only one week, January 31, 1977 to February 4, 1977 to marshall all resources. This was a major handicap. The Program apparently encountered another problem on the morning of January 28, 1977. On that date the Superintendent of Schools was interviewed and asked if participation by students, faculty and administration in the "Schools Without Schools" Program was required or whether it was optional. At the time, there was some question as to whether the alternative educational plans could be considered "legal" school days according to Title XXXIII and Chapter 4141 of the Revised Code of the State of Ohio. Consequently, his response was construed to indicate that participation was "probably" voluntary. Television programs that night indicated that indeed the alternative plans could be considered legal school days and participation was required. But if the legislation allowed for fifteen (15) additional "emergency days," the extent to which activity during the "Schools Without Schools" Program could be required was somewhat obscured in a legal haze. However, during the following week schools did not meet, and teachers in each school worked on their own programming for the enterprise. There is no evidence that a formal statement came from the administration resolving the issue of voluntary or required "for once and for all." It is true that on Page C-2 of "Handbook for Schools Without Schools" there is a list of "Some Expectations." Had they been conscientiously implemented the Program would undoubtedly have been a
major success. But, they were not generally considered to be mandates. So, the inevitable occurred - some students and faculty treated participation as being more or less voluntary whereas others treated it as being required.

Observations During Implementation

The comments that follow must be weighed in term of the fact that the Evaluator confined his observations mainly to the fields of science and mathematics and to only a small segment of the total efforts in those fields. Therefore, they must be judged only as they are part of all the observations of all the evaluators.

Interviews with teachers and administrators revealed that the planning of activities for the different schools during the "Schools Without Schools" Program varied greatly. However, the heart of the Program was to have one day of "official attendance" each week at a school that used coal or oil for fuel. For example, on Monday, the faculty, students and administration of School A would use School A. On Tuesday, the faculty, students and administration of School B, a school that was closed because it used gas as a fuel, would use the coal-fired School A. On Wednesday, the faculty, students and administration of gas-fueled School C would use School A and so on. The arrangement would be repeated the following weeks. Under this plan, 36 schools were open each day. (The remaining four days would involve television lessons, radio lessons, field trips and whatever a resourceful teacher could "dream up" including seminars in homes, bank conferences, Pizza Huts and bars; and telephone conferences.) On the one day of "official attendance" students were given assignments to be completed and turned in the following week. Students were "required" to complete assignments and were graded on them. At the "official attendance" sessions the teachers were expected to devote the minimal amount of time
giving assignments and give the maximal amount of time to answering student questions and giving assistance with difficulties encountered on the assignments.

Apparently, on February 3 and 4, 1977 the teachers were apprised of the logistics and on February 7, 1977 the TV lessons began with an orientation on TV. Because of the short time involved, participation of the teachers in the development of activities was limited. In fact, several persons interviewed indicated that the plans were made without consulting them and the tasks were thrust on them without much information. The "downtown staff" planned how the radio would be used. This planning was done before TV time was assured. The first efforts involved the elementary schools and three target areas were selected, reading attack skills, mathematics and foreign language. However, as plans matured the radio lessons on WBNS were geared mainly to the junior and senior high school whereas WCBE-FM radio and the television stations provided more time for elementary programs.

Recognizing that at any one time under ordinary circumstances, many different learning activities would be underway, and that a decision had to be made as to what would be telecast and broadcast, it was decided to program lessons that would have potential audience of at least 3,000 students.

The observations of this Evaluator indicated that the greatest effort to comply with "Some Expectations" was in the elementary schools and the efforts dwindled to little more than a nodding deference or less as the grade levels increase through junior and senior high school. In two classes, with slightly less than 50 minute sessions the teachers spent practically all the time on reading problems that comprised the assignments to be turned in the following week. The Evaluator wondered why the problems were not duplicated and distributed with the most of the
classroom time being devoted to more useful educational activities.

The climates in most of the junior and senior high school ranged from mild disorder to major chaos. It was, in general, difficult to discern that in some classrooms there was more than a carnival atmosphere. Some teachers attempted to establish a degree of order but others did not. The least desirable attitude observed was typified in the statement of one high-school chemistry teacher who when asked about what was one of the best things that happened during SWS, said, "The best thing was that four mornings a week I didn't get up until after 9:30 a.m."

The assignment of classes to coal-fueled buildings caused some major problems particularly when two classes of elementary students were assigned to the same large room. One class would be seated in one direction and one seated the opposite. There was little for the students to do but sit since such rooms were vastly overcrowded and the noise level of the talking and shouting by both students and teachers made any significant learning impossible. Discussions with teachers and administrators about completion of assignments resulted in inconsistent information, probably because there was great variance from grade level and from class to class even within buildings. However, if this Evaluator were to give a "ballpark figure" it is estimated that about 10 percent of the students completed and turned in their assignments; about 60 percent turned in incomplete assignments; and possibly 30 percent completed insignificant amounts or nothing at all.

Insofar as "creative activities" on the nonschool days are concerned, greatest efforts seemed to be in the elementary schools where many teachers, although not a majority, arranged field trips. The "creative activities" at the high-school level seemed largely to be telephone conferences between students and teachers and occasional meetings at teachers' homes. There was some concern about teacher
liability if alternate sites were used for learning activities so any such sites had to be approved by the Board of Education on the assumption that such approval would make it possible for the regular liability insurance to cover any accidents. The field trips mentioned most frequently involved the Center of Science and Industry (COSI) and the Fort Hays Career Center. A meeting with William C. Schmitt, Director of COSI indicated that the normal flow of visitors was 800 per day but that had increased to between 1200 and 1800 per day during the "Schools Without Schools" Program. The usual $1.50 per student and $2.50 per adult admission fees were waived for the "Schools Without Schools" Program.

No attempt was made to integrate the radio or television presentations directly with classroom activities although some effort was made to cover areas that were likely to be topics at the levels and classes for which they were designed. The aim seemed to be enrichment rather than direct instruction. According to the personnel in the radio and television stations, no effort was made to assess the size of the audiences or the reactions to the presentations. Any comments were unsolicited. The numbers of written comments that were received were greater than normal and were mainly positive. However, most of them came from older persons who apparently were intrigued by the diversion from the usual TV and radio programs. A few negative comments were received about the replacement of "soap operas" but these were in the minority.

For all practical purposes, demonstrations and laboratory exercises disappeared from the activities in junior and senior-high science classes. Reasons given varied but the two following were voiced most frequently:

1. "Not enough time in one class period when you have to give assignments and collect papers."

2. "I don't want anyone coming from another school to start using my laboratory and my chemicals (or equipment). And I wouldn't go into another school and use another teacher's laboratory and use his/her chemicals (or equipment)."
Despite subtle suggestions that the laboratories, chemicals, and equipment were the property of the school system, not that of the science teachers, and were purchased for the learning experiences of the students, the opinions expressed were unchanged.

A number of problems also arose among principals and their staffs who apparently were expected to move into their "assigned coal-fueled schools" and operate from those vantage points. It was clear that they sought quickly to "stake out" the largest and best furnished rooms as their territories in the assigned schools and protect them. It now became an issue of "whose school it was." The presence of additional administrators from Schools B, C, D, and E, for example, in School A placed burdens on parking spaces. As a result, signs indicating that parking places were reserved for only staff member of School A appeared. In another incident, a principal who was assigned to a coal-fueled school was adament about his students having chocolate milk because of its sugar content. In his school only white milk was available but chocolate milk was available in the cafeteria of the coal-fueled school. This created a crisis of major proportions in the cafeteria, particularly when he could not get white milk delivered for luncheon for his students. The upshot was that those students who picked up cartons of chocolate milk were forced to return it.

It was never really clear how television teachers were selected although it was indicated by some administrators that they were selected from among volunteers. Others stated that the "political process" was involved more often than not because those who were part of the "in crowd" were selected. There were also indications that few teachers volunteered to be exposed on the TV monitor because of their fears "of looking bad." If indeed those with the highest level of ability to function effectively on TV were selected, viewings of the TV lessons
suggested that the fears of the unselected were well founded. The Evaluator had experience for 1967-72 with the WHRO-TV Channel 15 of the Hampton Roads Educational Television Association in Norfolk, Virginia preparing science scripts and coaching "television teachers" for presenting science programs. The brief time available at Columbus, Ohio for preparing quality programs was patently insufficient. The coverage of the lessons was generally too extensive and consequently, the treatment of topics was cursory with little explanation. The presentations with few exceptions, resembled "badly read papers" at a meeting. The "retrospective visit" on March 18, 1977 revealed information that had not been mentioned on the earlier visits, namely, that TV lessons had been developed in the late 1960's with a zero budget by personnel involved with science and mathematics. There seems to be some concern that this expertise had not been tapped for the "Schools Without Schools" Program. Efforts to pursue this issue failed to elicit further comments.

Viewed in terms of the staff of the Columbus Public Schools, there was far too little time to prepare adequate alternative learning experiences "from scratch." Also, there was not sufficient time to prepare guidelines that clearly demarked the roles and responsibilities of administrators, faculty, students or parents. Although the effort did not break down, and some good things were accomplished, a much longer period of preplanning, not a panic effort as a response to a crisis, is clearly indicated.

Observations of the Non-School Community

The Evaluator visited a number of the TV and radio stations, had telephone conferences with personnel from the newspapers and talked with administrative assistants of two legislators who failed to appear for conferences. He also talked with personnel at COSI. It was evident
that, in general, the community did endorse, and marshalled its resources to implement, the "Schools Without Schools" Program.

It was indicated by some school personnel that certain establishments contributing time and space for alternate learning sites did so because they needed to improve their images in the community. Yet, it appears that when assistance was solicited from major enterprises to "help make education go," there was little reticence about participating. In fact, a number of industries, agencies and organizations offered to assist but there was neither time nor staff available to exploit the opportunities.

On several occasions it was indicated that sponsors of regular TV and radio programs paid for the time used for the educational programs when their programs would have been aired. This may have been true in some cases but discussions with personnel in two TV and one radio station seemed to indicate that was not true for all sponsors. It was pointed out that the total loss of sponsor revenue to all the TV and radio stations contributing free time was about $10,000 per week. It was further indicated that if a similar situation were to occur in the future, financing from public sources would be necessary to sustain the efforts. The TV and radio stations could not be expected to give free time for a repeat performance.

Conferences with Roger Masten, Junior High Arts Impact Coordinator who served as Production Program Coordinator for the TV lessons, indicated that the control of the TV programs was in the hands of school personnel and no attempts were made by station personnel to interfere with the content. However, the technical expertise, together with scheduling and maintaining the usual time constraints, were made freely available when requested. The Evaluator sat through several programs in the control rooms of the TV stations during the telecasting of educational programs and also observed the rehearsals and it was clear that, unless asked for
assistance, the station personnel kept "hands off," handling only the technical operations needed for production.

Both the Columbus Citizen-Journal and Columbus Dispatch made contributions to the "Schools Without Schools" Program. Both papers published logs of the TV and radio lessons that were aired on the participating stations each day. The Columbus Dispatch also published a feature called "Classroom Extra" that was "designed to keep students in touch with lessons and to supplement the instruction students will get during weekly class time." The feature varied in length from day to day, sometimes covering as many as three full pages. The areas covered in the features included, among others, "Reading," "Language," "Math," "Health," and "World Geography." The issues examined by the Evaluator seemed to be aimed at students from the middle elementary grades through the first two years of high school. The Evaluator was informed that the feature was produced with the consultation of a staff member of the Department of Education of Capital University in Columbus, Ohio.

Information about the way, and the extent to which, the "Classroom Extra" was used was scanty. Telephone conferences with persons at the Columbus Dispatch indicated only minimal feedback and most of that came from senior citizens who apparently found the feature an interesting diversion. The Evaluator queried a number of students about their use of the "Classroom Extra" and failed to find that any of them used it regularly. None of the teachers he interviewed used the feature as a regular assignment although most of them stated that they mentioned it to the students. Recognizing that the sample of teachers and students queried represented only a minute portion of the total population, conclusions about the way, and the extent to which the feature was used are obviously suspect.

In summary, the "Schools Without Schools" Program did, possibly for the
first time, instill both interest in, and awareness of, the problems that exist within the Columbus Public Schools, by a large segment of the community of Greater Columbus. If nothing else was accomplished, this was a major benefit.

Observations from the "Retrospective Visit"

On March 18, 1977, this Evaluator made an ex post facto trip to Columbus, Ohio to interview some of the personnel with whom he conferred on earlier visits to determine what their "hindsight views" might be. The list of persons with whom he met appears in the Appendices. The generalizations that follow are not in any particular order. Some represent almost direct quotes of statements made by interview, others are paraphrased from comments that were made and still others are summaries of points that were essentially similar.

1. In general, the retrospective comments about the achievement of the "Schools Without Schools" Program were less optimistic than the ones made while the Program was being implemented. Those made to the Evaluator on the last day of implementation, February 25, 1977 were more optimistic than those made on March 18, 1977.

2. A major concern expressed was the lack of time for, and less than broad participation in, preplanning for the activities in the classroom on the one day classes met, and also for what was expected of administrators, faculty, students and parents on the other days. It was stated frequently that no definitive directions came from the "central office" describing what was expected in school and out of school. As a result, conscientious teachers did their best with minimal information and the less conscientious did little or nothing. This resulted in resentment and, in some cases, verbal conflict between those "who did" and those "who didn't."
3. It was stated by several that groups of administrators from different schools can't be put in a designated building without chaos. The communications systems, particularly telephones, are overburdened and as a result, the administrators have little to do. The problems were particularly evident in the lunchrooms where six to eight principals with different ideas for food management gave conflicting orders. The parking lot situation was also chaotic with principals trying to line up buses and children with bullhorns. In brief, a big problem was the logistics of handling the activities of these professional personnel.

4. The less able students were "losers" in the "Schools Without Schools" Program. They did not respond to the extra help sessions arranged by conscientious teachers, but they did at first respond to enrichment activities such as field trips. However, participation in these waned. The more able students responded much better to help sessions, were more responsible in completing their assignments, and had better attendance than the less able students.

5. There was no clear understanding of the basic function of the "Schools Without Schools" Program. Some teachers were of the opinion that students were expected to progress in their learning although not so much as if they had regular classes. However, it seemed that the more widely held view was that the Program was mainly a holding action in which students would not retrogress.

6. Several persons indicated that one day a week without other contact was not sufficient to "get the show on the road." It was stated that even if the only other communication were by telephone, every student should be contacted, if at all possible, every day and kept as busy as possible. It was mentioned that many problems arose when younger children were home and both parents were working. It was stated that child abuse arose drastically in Franklin County, Ohio in which Columbus
is located. Apparently, many parents are not attuned to day-long contact with young children.

7. In summary, nearly everyone indicated that without more time for planning, another "Schools Without Schools" Program in response to crisis would fare no better. It was recommended that in a non-crisis situation as exists now, a crisis plan should be developed involving broad participation of both the school and non-school community, taking cognizance of what happened in January through March 1977. Such a plan should clearly define expectations; responsibilities and roles of administrators, faculty, students, parents and potential participating organizations and groups; and methods of maintaining more sustained activity among these participants so that students are kept productively occupied.
PERSONS IN COLUMBUS, OHIO CONTACTED BY DR. GEORGE G. MALLINSON DURING THE EVALUATION OF "SCHOOL WITHOUT SCHOOLS" SUPPORTED BY A GRANT FROM THE NATIONAL SCIENCE FOUNDATION - February 21, 22 and 25, 1977.

Monday, February 21, 1977

1. 8:00 a.m. - 9:30 a.m. at Fawcett Center for Tomorrow. Met with:
   a. Robert McNemar, Director, Science and Mathematics, Columbus Public Schools
   b. Otho Perkins, Science Supervisor
   c. Earl Tharp, Mathematics Supervisor
2. 10:00 a.m. - 11:45 a.m. at Center of Science and Industry. Met with:
   William C. Schmitt, Education Director, COSI
3. 12:45 p.m. - 1:05 p.m. at Mohawk Jr-Sr High School. Met with:
   Miss Russell and Physics Class in Room 311
4. 1:45 p.m. - 2:30 p.m. at Mohawk Jr-Sr High School. Met with:
   Mr. Hopper and Algebra I Class in Room 204
5. 2:35 p.m. - 3:20 p.m. at Mohawk Jr-Sr High School. Met with:
   Mrs. Cooper and Biology Class in Room 312
6. 3:00 p.m. - 3:45 p.m.
   Telephone calls to staff in offices of Messrs. McNemar, Perkins and Tharp to plan for activities on Tuesday, February 22, 1977.

Tuesday, February 22, 1977

1. 7:45 a.m. - 9:45 a.m. at WTVN-TV Channel 6.
   a. Met with Roger Masten, Junior High Arts Impact Coordinator, Columbus Public Schools who was serving as Production Program Coordinator for ETV lessons.
b. Met and discussed ETV lessons with Bob Weisner, Production Director, WTVN-TV, Channel 6 and Chris Walden, Assistant Program Manager, WTVN-TV, Channel 6.

c. Watched organization of activity for production of ETV lessons and watched two programs being telecast, one at 9:00 a.m. for 7th grade mathematics, and one at 9:15 a.m. for 8th grade mathematics.

2. 10:00 a.m. - 12:00 noon at WCMH-TV, Channel 4

a. Met with Robert Odell, Program Director, WCMH-TV and production staff to discuss problems with producing ETV programs with regular teachers making presentations.

b. At 11:00 a.m. watched ETV program for elementary science geared to lower elementary grades.

c. At 11:15 a.m. watched ETV program for elementary mathematics dealing with fractions geared to lower elementary grades.

3. a. 12:45 p.m. - 1:05 p.m. at Beechcroft School

(Walford students (15) in attendance). Kindergarten class - Mrs. Betty Curry

b. 1:05 p.m. - 1:30 p.m. at Beechcroft School

Walford 6th grade and split 5th and 6th grade back to back in same room. Mrs. Debbie Embree (23 students) and Mr. Richard Touvell (25 students).

c. 1:30 p.m. - 2:00 p.m. in Beechcroft School Library

Walford 4th and 4th and 5th split. Also 3 students needing special help. Mrs. Barbara Barlow (21 students) and Mrs. Heisel (18 students). Special teacher Mrs. Nuld worked with 3 students, I almost done when I entered, I she handled in about 20 minutes and 1 with whom she just began working.

d. 2:00 p.m. - 2:30 p.m. in Beechcroft School

Two classes of Walford 1st graders back to back in large room. Mrs. Catherine Shafer - 20 students, Mrs. Cynthia Clark - 20 students.

e. 2:30 p.m. - 2:50 p.m. in Beechcroft School

Met and discussed situation with Mrs. Diane Burwitz, Principal of Walford.
3. **4:15 p.m. - 5:15 p.m.**

Met in group with Evaluation Team and Representatives of Columbus Public Schools at CEA building. Dr. Sanders passed around list for names of attendees.

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**Friday, February 25, 1977**

1. **8:15 a.m. - 9:00 a.m. - at East Main High School, Champion and Monroe students in building.**

Met with Teresa Ayltte - 7th grade mathematics teacher at Champion and Gerald Casper, 8th and 9th grade mathematics teacher at Champion. No students present.

2. **9:00 a.m. - 9:20 a.m. at East Main High School**

Met with Dan Spivey, Principal at Monroe.

3. **9:30 a.m. - 10:00 a.m. at East Main High School**

Met with Robert W. Marsh, Physical Education and Health Science Instructor at Monroe. In "study hall" with 51 students.

4. **10:05 a.m. - 10:50 a.m. at East Main High School**

Met with Jeff Cox, a 9th grade general science teacher. Met in study hall with 42 students.

5. **11:00 a.m. - 11:40 a.m. in East Main High School**

Met with Curt Hilton, Teacher of 8th and 9th grade algebra and general mathematics at Monroe. 25 students in "holding pattern."

6. **1:15 p.m. - 2:30 p.m. in Headquarters, Columbus Public Schools**

Met with Robert Barrow, Budget Analyst (lobbyist), Columbus Public Schools to discuss legislation of "emergency days" and legality of "schools without schools."

7. **3:00 p.m. - 4:30 p.m. - Capitol complex**

Waited for 2 legislators who agreed to show up but who did not. Talked briefly with their administrative assistants.
Friday, March 18, 1977

1. 8:00 a.m. - 9:00 a.m. at Walford Elementary School. Met with:
   Diane Burwitz, Principal and Elementary Teacher

2. 9:15 a.m. - 10:45 a.m. at WTUN-TV Channel 6. Met with:
   Chris Walden, Assistant Program Manager

3. 11:00 a.m. - 12:00 m at Annex Building, Columbus Public Schools. Met with:
   a. Otho Perkins, Science Supervisor
   b. Earl Tharp Mathematics Supervisor

4. 12:00 m - 1:00 p.m. Met with:
   Roger Masten, Junior High Arts Impact Coordinator, Columbus Public Schools who served as Production Program Coordinator for ETV lessons.

5. 1:15 p.m. - 2:30 p.m. at Marion-Franklin Senior High School. Met with:
   Mr. Hopper, Instructional Coordinator

6. 2:30 p.m. - 4:00 p.m. at WBNS Radio, 62 East Broad Street, Columbus, Ohio. Met with:
   Nancy Michaels and Art Araga, Production Department, WBNS.
Schools Without Schools
Site Visitation Report

by

Charles Warfield

The Problem

The concept of "Schools Without Schools" is an outgrowth or reaction to an energy crisis which was experienced by the Columbus Public Schools. This crisis was not merely one that the public schools experienced, but one which encompassed the whole State of Ohio during this past Winter of 1977. The problem was the shortage of natural gas available for the public school system as well as other factories and industries in the State of Ohio. The public schools were notified sometime in January that their gas allocation for the next three weeks would not be met and that there would be a gas cutback for the school system. The school system found itself in what is called, "the commercial category", which put them on low priority in terms of energy supply. While school officials felt that the Columbus Public Schools should be put in a higher priority category, such as that of the hospitals and other public service agencies, they were unable to have the system moved into that position. The board appealed to the State Legislature which was unable to help with the supply of natural gas needed to operate the schools. The Governor was also unable to help the school system with securing more natural gas to keep the public schools operative. So the energy shortage created a crisis for the Columbus Public Schools.

Through the leadership of the superintendent, the school system began to look at the alternatives that were available. The problem became one of having one hundred and seventy-seven buildings to operate with only thirty-six equipped with alternative fuel systems that could function on fuel other than natural gas for a least three weeks of the
school year. The first alternative was essentially, to close the school system down completely. This was an unacceptable alternative due to the excessive amount of employment compensation that would have to be paid to the staff members who were employed under contract in the public schools. This plan was additionally ruled out because any days that the schools were closed would have to be made up later on in the school year, causing additional financial difficulties for the school system.

The second alternative was to institute triple sessions in the approximate forty schools available to all of the students in the public school system which totals some 96,000 young people. This too was ruled out as being unfeasible. Lastly, the superintendent suggested that the available schools would remain open and implementation of a new concept "Schools Without Schools" would be instituted. Basically, it meant that the community would be asked to open its doors to young people and provide the necessary space for education during the three weeks the school system would have to be closed. The idea of "Schools Without Schools" was presented to the Board of Education and received unanimous support.

Administrators' Reaction

The superintendent called his top-level administrators together, presented the plan, indicated the affirmative action of the board, and indicated that he wanted every individual to do his best to make the project a success. One of the major concerns that confronted the administrators during their early deliberations was transportation... how to get the youngsters moved within the city to the different sites that might be made available. It appeared that transportation might be a big obstacle in determining the success of "School Without Schools". The city official were notified, as well as the total community, of the plan to move ahead with "Schools Without Schools". The mayor immediately demonstrated support of the
program by providing $25,000, to the Columbus Public Schools for trans-
portation. The city Recreation Department also made space available
throughout the city for students to meet and participate in different
activities. Another concern was the contract with the Teachers' Associa-
tion of Columbus; to alleviate this possibility, it was decided early
in the plan that the executive secretary of the association would be
included in all planning meetings with the administration in an effort to
establish strong support for the teachers' association in implementing
the proposed new plan.

During the meeting of the administrative staff and the Columbus Education
Association, it was decided that there would be no layoffs and that everyone
would be paid during the three week period that "Schools Without Schools"
would be in operation. It was decided early in the deliberations that this
was a crisis program, and that speed was of the utmost importance. Elaborate
planning would not be essential, and central administration would take the
greatest responsibility for leadership in an effort to make the program
operative. Dr. Ellis, the superintendent, pointed out that his staff was
well qualified, well equipped intellectually and functionally, and had
strong organizational abilities which would enable them to adequately
implement the crisis program within a very few days. This demonstration
ability and preparedness of the central administration and resulted from
the fact that central administration had been confronted with a crisis
similar to this two years ago when the Columbus Education Association
struck the Columbus Board of Education. Emergency plans of a similar
nature, calling for processes similar to those that would be followed
during this natural gas shortage, had been implemented.

And so, with the expertise of the staff, the involvement of the
teachers' association, the leadership of Dr. Ellis, the superintendent,
and the approval of the board, the Columbus Public Schools set about to
institute the "Schools Without Schools" concept.

Implementation of Plan

After central administration had identified the structure for the new program, principals were briefed on the rules of the game. One of the biggest complaints presented by the principals was that there was not enough structure and that they would not be able to keep track of all of the places where children would be housed, and consequently, they would be unable to keep a record as to whether or not teachers were meeting with students in the various places around the city having classes. In response to this concern, they were encouraged to be as flexible as possible and return to their buildings and work with their staff to increase flexibility and creativity to ensure that the three week period would be operational, and would give maximum education to students in their building.

The principals went back to their buildings and began talking to teachers about the plan. In response, staffs began to plan the kinds of things they might want to attempt during the three weeks the schools would be closed. The plan was that each elementary and secondary school would be bused into one of the thirty-six operative schools one full day a week. Each teacher would have a chance to meet with their class at this time, and give a week's assignment to the students. During the rest of the week teachers could plan activities, such as field trips, to many of the educational sites throughout Columbus and the surrounding areas. Teachers could also set up alternative meeting places providing additional contact with the students. Many teachers immediately set out to secure alternative meeting spots to the public schools. Administrators were cautioned to be as positive toward teacher request as possible.

Principals were also notified that they would be in charge of certifying all structures made available to the students in their school buildings.
That is, any offer of space would have to be checked out and certified by the principal of the building before students would be allowed to use the space made available. Principals were informed of the usual risk involved in recruiting voluntary help and, of course, using buildings that might be made available. However, they were strongly encouraged by central administration to take the risk, and use voluntary help as well as the facilities that would be donated to their buildings, provided they were a safe structure and had been approved by the fire marshall and other city officials. Private homes were also used, but were not under the same constraints as buildings such as bars, banks and other public buildings that were later to be donated to the school for use as classroom space. Consequently, with the orientation of the principals, an operation and coordination center was set up in the administration building to coordinate and centralize all requests that might come to the Columbus Public Schools. The center would handle such requests as volunteer services, donation of buildings, bus trips and other related concerns. The operation and coordination center proved to be one of the most important ingredients for the success of "Schools Without Schools" and it became apparent that it was essential for an operation and coordination center of this nature to be instituted in the Columbus Public Schools.

While planning and work was being done within the central administration, leaders within the legislature were implementing legislation that would enable a program of this nature to operate without the schools being penalized for not being officially opened. At the same time, the superintendent worked very closely with the parochial superintendent in trying to provide as many facilities and program that could be made available to the parochial school children assuring them they too could participate in this new program.
Community Response

The response to the concept on the part of the Columbus community was tremendous. The business community began to open its doors to the students of the Columbus Public Schools making available every possible facility that existed. The television stations, one by one, began to donate free morning television hours for educational instruction which took the place of many of the popular early morning programs usually scheduled. The Columbus Dispatch and other newspapers fell in line and donated two full pages which the public schools used to present educational material each day to the entire school district. AM and FM radio also provided free time for educational programs that were geared to the students during the period of time they were not in school. The sponsors of the radio and television programs were contacted and agreed to allow the time to be used by the Columbus Public Schools to provide educational programming. The State Superintendent of Education also became excited about the program and provided money for staff members to help develop the media presentation.

Teacher Response

Many of the teachers in the Columbus Public Schools saw this as an opportunity to attempt creative and innovative ideas without the structure of policy and buildings. Many teachers found exciting ways to educate the students. Some teachers made arrangements to contact their students every day, providing many of the students with daily education. One teacher, for example, rode around with his CB radio on keeping in contact with his wife at home. When students would call with problems, his wife would call him on the CB radio, and he would then go the the youngster's house and help the student with homework that had been assigned. Other teachers made sure that their students watched all television and radio presentations as well as work and problems that were found in the local newspaper. Consequently,
teachers found themselves with much more paperwork because of the way the program was operated.

Several problems did become apparent. Assignments were given one day a week and for a week at a time. When the students returned, that simply meant the teacher would receive a week's homework at a time, and in the high school, this resulted in a great deal of work for the teacher as well as for the student. In another problem area, teachers were selected for the media presentation by the administration. Some teachers, reportedly, felt hurt because they were not picked as special teachers to either work on the newspaper or radio or television presentation.

This period of time also helped teachers to learn more about the curriculum of the Columbus Public Schools, and to be creative in achieving the goals that had been set for the different class levels. Many teachers went further than the job called for, using their own gasoline and their own cars to transport the students to the different sites where learning was taking place. Some of the teachers felt that there were too many meetings being held for teachers and that principals were asking too much in terms of record keeping and paperwork at the different sites where youngsters were meeting. Teachers felt that the main reason for the success of the project, as it related to them, was that they had a strong contract which allowed them to bargain from a position of strength, particularly in relation to the parameters that were set regarding the operation of the schools during this proposed time. They felt that much of their participation depended upon the ability of the Columbus Education Association to be involved in the decision making at top level and the strength of their contract, which allowed them to negotiate reasonable changes in order for the "Schools Without Schools" to operate successfully. Although there was some concern on the part of the teachers that adequate screening was not implemented in terms of securing the sites opened to youngsters, generally they felt
that an adequate job had been done by the administration to secure the sites that had been donated by citizens in the community where classes would be held.

Parent Reaction

The reaction of the "Schools Without Schools" from parents of children of the Columbus Public Schools was for the most part favorable. Parents felt that because of "Schools Without Schools_ and the presentations that were made on television and in the newspaper, helped them to better understand the role and purpose of the schools in the educational process. For many parents, this was the first time they really began to understand what schools were trying to accomplish and exactly what went on in the classroom with the children. A lot of this occurred because parents allowed their homes to be used for classrooms and actively participated in the education of young people while they were using their homes as a classroom setting. Parents particularly liked the educational trips their children were having that were a direct result of the "School Without Schools" Program. Parents could actually observe and appreciate what was happening to their children because of their involvement in the education of their children.

Many of the parents also had no concept of the work that had been done by teachers and administrators prior to the "Schools Without Schools" Program being initiated. They were unaware of the long hours that had been put in by teachers and administrators in an attempt to make this program successful. Parents were greatly impressed by the commitment of the Columbus Public Schools to keep schools opened, even though there was a crisis. Nevertheless, it was felt by many that the schools didn't take the point of least resistance, which would have been to shut the schools down as other surrounding school districts had already done. There was a sense of pride and strong, favorable
feelings toward the leadership in the community, as well as in the schools, for pulling together a program of this nature with such short notice. Even though the Columbus Public Schools were presently fighting a school desegregation case in the federal court, neither White nor Black parents complained about busing students around the community. Many White students were bused into predominantly Black schools for the one day, while many Black students were bused into White schools for the one day of school each week. While this busing situation, of course, did not replicate anything similar to a desegregation order, it is significant to say there were no complaints about busing into neighborhood schools or neighborhoods which were predominately Black or predominately White. As a sideline, shortly after the team visited Columbus Public Schools, the desegregation order was received.

There were some hardships and concerns that parents had during the "Schools Without Schools" Program. For many parents the schools provided a day care service which was not available during this crisis period. Many parents had to have older children stay home and care for younger children because baby sitting services, through the schools, were not available. This caused the older children to miss the days that they were to be at school receiving assignments, and did not allow them the opportunity to go on field trips that were being provided within the school system.

Many of the advisory councils which were set up by the schools did not meet at all, and as a result, much of the work that the advisory councils had been doing fell behind. Provisions were made, however, for these group meetings to be made up later in the year.

Another problem was scheduling. Many of the parents felt that the reading programs and the morning television programs were too early for the young students. Some programs started as early as 7:30 a.m., and parents complained that very young children were still sleepy and, consequently, they were not interested in watching the early morning programs. Many
parents had three, four and five youngsters in the family, all of whom had
different schedules to be met. This became very confusing for some parents,
particularly in terms of when and where youngsters were to meet, and what
time they were to be picked up by buses whose time schedules were continually
changing. Considering all of the problems, however, the parents managed
to survive much of the scheduling changes.

Many parents complained that it was upsetting to have their children
home all day, and because of the cold weather, they were unable to go outside,
which caused additional problems in some households. Many parents humorously
complained that their children were "eating them out of house and home"
as a result of not being able to go outside. In general, parents willingly,
coped with inconveniences as best they could with the knowledge that the
school system was doing their best to provide some kind of education in
the time of crisis.

Student Reaction

"Schools Without Schools" was what might be called a very successful
program considering attendance. Attendance was taken every day throughout
the program. During the first week in the secondary schools, 81.9% of the
students were in attendance. In the elementary school, 86.6% of the
children were either at the sites or in the schools they had been assigned.
the second week, 87% of the secondary students participated in the "Schools
Without Schools" and 93% of the elementary students participated. In the
third week, which was the final week, the program began to experience a slight
down-hill trend, when attendance fell off to 80%, in the entire system. Some
of the students were overwhelmed with the large amount of homework that was
given them. Many of the students who went to school on the one day schedule
and received the homework assignment, felt they were given too much homework
for the period of time available to complete assignments. Others complained
that for the amount of homework that was given, many did not have ample
study space at home where large families and cramped conditions did not
permit good study facilities. In spite of these problems, it was obvious
that some of the students were very much excited by the program. Others
were less than enthusiastic, but it appeared over all, that students
were making an effort to adjust to a crisis within their school system.

Summary

The reason for much of the success of "School Without Schools" in my
opinion, is that the crisis imposed on the community was defined as something
that was outside of the control of the administration, the school board or
the teachers union. As a result of this, all factions felt they could take
part in attempting to make this particular program operate successfully.
The community decided it would try to become part of the educational
laboratory for students. The success also depended upon the strong
leadership and planning that went into the formation of this program.
Capable leadership, with authority, appears to be one of the key components
essential in putting together a concept and operation of this nature. Oddly
enough, there were no public relations programs to sell the concept because
of the lack of time. Additionally, there was no public input into this
program. Many felt that the program would not have been successful unless
it was implemented immediately, and that a crisis is essential for a program
of this nature to work. Of course, in every segment of the interview
completed by this reviewer, no one thought that "School Without Schools"
was equal to the regular school program, and certainly all were anticipating
the resumption of the regular school program which began March 7.

One of the prime outcomes of a program of this nature was that it had
great human relations value. It is my belief that there was an improvement
in student-teacher relationships as well as teacher-parent relationships.
Teacher-administrator relationships were greatly improved as a result of this program. It helped all segments of the educational community, including parents, to have a better understanding of the tasks that other parts of the education community perform. One of the shortcomings of the Columbus experience is that there was no systematic evaluation of the program other than that carried out by the team from Western Michigan University and others. There was no internal system operating to monitor the new and innovative techniques that teachers were using to educate youngsters. The only possible method of gathering this information, ex post facto, would be on an informal basis, from teachers as they internally share information that can be compiled.

Possibly many of the media presentations can and will be analyzed later as well as newspaper and radio presentations. Unfortunately, much of the new strategies developed by the Columbus Public Schools for teaching youngsters outside of the school walls will not be formally recorded for prosperity.
This information is my report for the "School Without Schools" Program. It consists of my interpretations and conclusions based on the interviews and information supplied to me about the following issues:

1. What factors led to the development of the SWS program?
2. How much power have the public utilities over public education?
3. Is the SWS program in violation of any laws or contracts?
4. Who were the key non-school actors in developing the SWS program? What did they do?
5. What was the cost of the SWS program?
6. Could the SWS program succeed without a crisis?
7. How would a school system prepare itself for a crisis of this nature?
8. What steps were necessary to develop and implement the SWS program?
QUESTION: What factors led to the development of the SWS program?

ANALYSIS: The emergency that led to the SWS program was a short term problem of unusually cold weather and the long term problem of Columbia Gas of Ohio, Inc., in supplying the natural gas needs of the Columbus area. According to the Mayor and other school persons interviewed, the gas shortage in the area started five years ago. For the past three years, schools were curtailed in their gas allotment by 40 percent as they were this year at the beginning of the heating season. But due to the past warmer winters, this curtailment caused the Columbus School System a few problems. The extreme cold of the 1976-77 winter was very unusual—1 in 10,000 probability of this happening. This was what brought this crisis to a critical situation.

The Columbus school system had reacted to this problem by starting a conversion process of changing their heating system to multi-fuel installations, and practicing strong conservation procedures.

Columbia Gas of Ohio, Inc., had made provisions for additional interstate gas supplies the previous winter and again this winter but allocated this year's supply according to procedures that would have cost the users additional money because they had to use this high cost gas first. Few users opted for this option which was a very sound management decision considering the probability of the weather deviating 10 percent from normal is 1 in 100.

According to Columbus Gas, the requirement to use the interstate gas was based upon the cost saving management decision of the company. In order to insure the additional 12 to 13 billion cubic feet supply when needed, they had to guarantee purchase before the heating season.
of 1976-77. Again, this decision was based on the same probabilities of the weather deviating from normal and if the gas was not needed, it would have cost the company millions of dollars.

Another factor that must be considered was the design capacity of Columbia Gas' distribution system which is -4°F. When the temperature drops below this temperature for extended periods of time, the gas company must curtail its industrial and large commercial users. Schools are classified as large commercial users by the Public Utilities Commission of Ohio and have been since the 1930's. This constraint of the distribution system would have closed Columbus schools using natural gas for about five days without any shortage in supplies.

Another issue that probably had the greatest impact on the decision to close the Columbus schools was "Paychecks vs Schools". This issue was stated in most interviews as a major variable in the decision to curtail gas supplies to schools.

In conclusion, the closing of Columbus schools this year was an event due to the extremely cold weather and some management decisions based upon probability values of the weather deviating from normal. This same emergency could happen again unless schools convert their facilities to multi-fuel heating systems, the Public Utility Commission of Ohio changes its allocation priorities, and Columbus Gas increases its storage capacity and is allocated a greater quantity of interstate gas.

Based upon the data in Exhibits IV and VI and other information provided in the interviews, the closing of Columbus schools could not have been prevented this year unless the school system would have
converted to bottled gas at extremely high cost during this emergency. Dayton school system made this conversion at an increased cost of $475,000.

**QUESTION:** How much power has the public utilities over public education?

**ANALYSIS:** There was no indication from any source that the crisis was an attempt to control public education. Schools appeared to be an innocent party in a national problem of control over the supply and price of natural gas. The extreme cold winter of 1976-77 caused more problems than anticipated in this conflict. The Ohio Senate has an investigation underway to determine if there is an organized withholding action by the major gas producers to withhold natural gas from the interstate market.

**QUESTION:** Is the SWS program in violation of any laws or contracts?

**ANALYSIS:** Due to master contracts with the teachers and other employees of the Columbus public schools which involves school calendars, loss of pay, and teaching, it was necessary to negotiate memorandums of agreement with the groups (see Exhibits I and II). These agreements provided for calendar changes and expected duties of the staff during the emergency.

Another legal problem was the use of non-school facilities and liability coverage for the school system and the teachers. A procedure was developed in conjunction with the system’s insurance agent whereby any facility used must be approved and inspected in advance by a school administrator and the fire department.
Ohio has a legal requirement that school must be in operation 182 days (Ohio Revised Code 3314.48). In addition schools may close up to five days for calamities such as weather, epidemics, etc. Teachers and other school employees would not lose pay for these days. In order for the SWS program to function for up to three weeks, it was necessary for the legislative bodies of Ohio to pass emergency legislation. Senate Bill No. 51 (see Exhibit III) allowed schools an additional 15 days due to this emergency. This bill was passed in less than 10 days during normal sessions of the Ohio Senate and House of Representatives.

An important issue that the school system had to consider was to pay teachers for staying at home or to pay teachers for operating a program in less than desirable facilities. The SWS program was a legal alternative after the passage of Senate Bill No. 51 and the other agreements between the employee organizations.

**QUESTION:** Who were the key non-school actors in developing the SWS program? What did they do?

**ANALYSIS:** Mayor Tom Moody and his staff. This group helped coordinate the use of community facilities for the SWS program. The Mayor also was very active behind the scenes lending his support.

Senator Oliver Ocasek and Representative Vernal Riffe, Jr. Both of these persons were instrumental in the passage of Senate Bill No. 51.

Columbus Dispatch which provided in their news coverage the crisis, the Classroom Extra, and the attendance of a reporter as an observer at all school cabinet sessions.
Columbus Fire Department for inspecting all non-school facilities used in the SWS program.

Columbus Catholic School System in developing plans for closing buildings and operating in reduced facilities prior to the crisis.

Columbus radio and TV stations which supplied the facilities, air time, and expertise in producing the educational programs.

Private agencies which opened their facilities and provided staff for educational tours.

Ohio State University which provided programs and facilities.

**QUESTION:** What was the cost of the SWS program?

**ANALYSIS:** The major cost of the SWS program was a foregone activity cost of using staff in planning and operating the SWS program. During this crisis most of their normal duties were suspended or reduced in scope so that they could devote full time to the program.

Additional costs to the Columbus school system were for supplies and materials for the TV and radio programs. This was estimated to be $10,000. Other increased costs were gasoline and maintenance for buses, maintenance personnel for building closings, and the addition of substitute teachers for those involved in the TV and radio programs. Offsetting these cost increases were reduced overtime for bus drivers, reduction in heating and lighting expenses in the closed buildings, reduced use of substitute teachers, and some reduction in the use of classroom supplies.

In addition to the school system costs, the radio and TV stations were estimated to be losing $100,000 in advertising revenue potential.
The Classroom Extra was estimated to have a cost if the space was purchased of $4,000 per day. All of these institutions have some foregone staff activity costs that were not estimated.

The City of Columbus allocated to the Columbus school system $25,000 to be used to pay for buses for educational field trips. The city also had a large foregone activity cost for operating and maintaining their facilities that would normally be on reduced hours and staff during this time period.

Other private and public agencies had foregone staff activity costs that were not estimated for running the greater than normal educational tours through their facilities.

In summary, the SWS program did not cost the Columbus school system any large direct dollar expenditures. The biggest costs were foregone staff activity costs. If the services of the radio, TV, and/or newspaper were direct costs to the school system, it is doubtful if the program would have been economically feasible.

**QUESTION:** Could the SWS program succeed without a crisis?

**ANALYSIS:** No. The SWS program worked because both the staff and school administrators faced a common enemy. Also, the SWS program provided the teachers and administrators with the opportunity to be innovative and creative and to do this in the limelight of the public due to TV and newspaper coverage. The "Hawthorne Effect" was operating in the beginning of the crisis. Teachers, students, and schools were receiving front page news coverage. Towards the end of the program it was page "three" news. Interviews with teachers...
and administrators indicated that the "Hawthorne Effect" has worn off and lets get back to regular school.

**QUESTION:** How would a school system prepare itself for a crisis of this nature?

**ANALYSIS:**
1. Develop some general guidelines for the operation of schools in a reduced state.
2. Identify key staff who have technical and functional knowledge about the total school system.
3. Review any laws, contracts, and insurance policies for provisions for operating other than the normal school day.
4. Plan for a communication center with extra phone lines.
5. Plan for a communication release network with all local news media.
6. Establish a cabinet of central office staff, board members, teacher and other organization representatives for dealing with daily problems.
7. Plan for building administrators to be the key communication person with their staffs.
8. Develop logistic plans for
   a. Food service
   b. Transportation
   c. School supplies and equipment
   d. Operations and maintenance of buildings
9. As soon as possible determine an ending date for the crisis.
QUESTION: What steps were necessary to develop and implement the SWS program?

ANALYSIS: The Columbus Public Schools Handbook for School Without Schools is a very complete guide for planning an educational crisis. The following sections are to present the major concerns for communications, personnel, and other educational support systems used in the SWS program.

The major items that should be presented in the communication section are:

1. List of contact persons for all news media sources
2. Information center with lists of persons and areas of responsibilities
3. Schedule of school assignments and location of all building administrators
4. Statement of school board resolution concerning emergency
5. Guidelines for all staff to use in dissemination of all communications
6. List of persons to contact for generating support for emergency. List of community leaders
7. List of police, fire, and other critical services who need to plan for the emergency.

Issues that deal with staff assignments and responsibilities are:

1. Memorandums of agreement between the school board and employee organizations concerning changes during the emergency
2. List of responsibilities and duties of the various staff categories
3. Assignments for school nurses, counselors, custodial, maintenance, and lunch room personnel
4. Rules relating to student attendance and use of facilities and supplies

5. Principals responsibilities during the emergency.

6. Coordination of special programs such as,
   a. Special education
   b. Vocational and technical education
   c. Interschool athletic events and practices

Information that is needed by the staff concerning community resources should list:

1. Availability
2. Program description
3. Group size
4. Age level
5. Method of reserving the facility
6. Schedules of TV, radio, or newspaper educational supplements or programs.

Procedures need to be established by the central office for the following activities:

1. Use of non-school facilities. Inform police and fire departments of their use
2. Transportation routes and services
   a. Time schedules and routes
   b. Supervision assignments
   c. Field trip procedures
3. Record keeping procedures for student and staff data
4. Lunch program fee collection
5. School moth-balling procedures
6. Emergency storage procedures for
   a. Art supplies
   b. Audio-visual equipment
   c. Business office education equipment
   d. Lunch room supplies and equipment
   e. Industrial arts area equipment and supplies
   f. Library supplies
   g. Physical education lockers
   g. Musical equipment

7. Record keeping procedures for removal of any equipment or supplies from building due to extremes in temperature

8. Mail delivery schedule

9. Scheduling of additional trash collection

10. Payroll schedules and reporting

11. Provisions for additional phone equipment in buildings

12. Procedures for ordering supplies and delivering them to the staff in their new building assignments

13. Develop logistic systems for moving food, supplies, and equipment to the needed locations
EXHIBITS ON FILE RELATING TO SCHOOL WITHOUT SCHOOLS INTERVIEWS

EXHIBIT I and II  Memorandum of Agreement between Columbus Board of Education and OAPSE, Columbus Public Schools Chapter. Concerned with Educational Aids and Food Service Personnel.

EXHIBIT III  Copy of Senate Bill No. 51 - To provide for 15 days for energy shortage school closings during the 1976-77 school year, and to declare an emergency.

EXHIBIT IV  Degree Days Chart by Columbia Gas of Ohio, Inc.

EXHIBIT V  Copy of Curtailment Levels by States of Gas by Columbia Gas of Ohio, Inc.

EXHIBIT VI  Weekly Weather Comparison for Calendar Period - November, 1976 to Date with Actual Weather for Same Period Last Year. Columbia Gas of Ohio, Inc.

EXHIBIT VII  Copy of February 21, 1977, news release by Columbia Gas of Ohio, Inc. on increased gas allocation.

EXHIBIT VIII  Series of Press Releases of the Mayor's Office concerned with the Energy Crisis.

EXHIBIT IX  Survey of School Closings in Ohio due to Weather and Lack of Energy from Senator O. Ocasek's Office.

EXHIBIT X  Letter from Attorney General of Ohio Concerning Public Law Revised Code Section 4905.302. This was in response to Mr. White of Columbia Gas of Ohio, Inc.

EXHIBIT XI  Press Statements by Senator Oliver Ocasek and Representative Vein Riffe.

MEMORANDUM OF AGREEMENT

The Columbus Board of Education and the Columbus Education Association hereby agree to the following school calendar changes and to the guidelines set forth herein relative to the emergency closing of most Columbus Public School buildings as a result of the natural gas shortage currently being experienced by the Columbus Public Schools:

Calendar Changes

1. The Professional Meeting day previously scheduled for February 21, 1977 shall be eliminated. An Emergency Planning day shall be observed Wednesday, February 2, 1977 as a day for teachers to plan with their building administrators for activities to take place during the emergency closing. At least half of said Emergency Planning day shall be reserved for individual preparations by teachers.

2. The spring break days previously scheduled for April 11 through 15, 1977 shall be observed as a winter break to be scheduled February 28 through March 4, 1977.

Emergency Guidelines

1. The Columbus Board of Education and the teachers of the Columbus Public Schools, represented by the Columbus Education Association, shall endeavor, during the period of emergency closing to provide the best possible education for pupils of the school system under the emergency conditions by utilizing available community facilities and resources in addition to available school system facilities and resources.

2. During the period of emergency closing teachers shall be assigned duties or shall undertake duties usually associated with the teaching profession and shall not be assigned duties of a "make work" nature, extensive clerical duties, or assignments not usually associated with the teaching profession.

3. Participation in the programs designed for presentation in the media shall be on a voluntary basis.

4. Participation in activities beyond the normal work day of teachers shall be on a voluntary basis.

5. Teachers shall have no less than the normal preparation, planning, and lunch periods provided during the regular school year, on a weekly average.
6. A joint Conflict Resolution Committee, composed of four members shall be established to expedite the resolution of problems related to the emergency closing or programs and activities arising therefrom. The committee shall report at least weekly to the Superintendent and the President of the Columbus Education Association and shall operate under the rules for joint committees set forth in Article 508 of the CEA-Board Master Agreement.

COLUMBUS BOARD OF EDUCATION
OF THE COLUMBUS CITY SCHOOL DISTRICT

By

Mrs. Steven Boley, President

John Ellis, Superintendent

COLUMBUS EDUCATION ASSOCIATION

By

Theodore W. Thomas, President

Jack Burgess, Executive Director

Mrs. Prentice moved, seconded by Dr. Walker, that the above recommendation and the Memorandum of Agreement be approved.

AYES: Mrs. Prentice, Mrs. Redden, Dr. Walker, Mrs. Boley, Dr. Hanlar, Mr. Langdon - 6

NOES: None

Motion carried.
Representatives for the Columbus Board of Education and OAPSE, Columbus Public Schools Chapter, hereby agree to the following emergency guidelines and acknowledge the following calendar changes related to the emergency closing of most Columbus Public School buildings as a result of the natural gas shortage being experienced by the Columbus Public Schools.

**CALENDAR CHANGES**

In the event the Columbus Board of Education re-schedules spring break from April 11 through April 15, 1977 to February 28 through March 4, 1977, holidays provided classified employees covered by Section 14.1 of the current Board/OAPSE Agreement shall be observed on March 3, and March 4, 1977 and holidays provided classified employees and educational aides covered by Section 14.5 shall be observed February 28 through March 4, 1977.

**EMERGENCY GUIDELINES**

The emergency closing of many school buildings may result in an interruption in the normal work activities of some educational aides and classified employees such as food service personnel. Such employees should first be offered work within their classification. If such work is not available, employees should be offered other reasonably suitable work. The hours of work offered will be at least equal to the employee’s regular scheduled hours of work on a weekly basis or two-thirds of such schedules hours if the work offered is on an overtime basis. If employees who are so reassigned elect an unpaid status for the period of the emergency they shall do so without loss of paid holidays which occur during the emergency period. Employees who elect an unpaid status will have their life and medical insurance coverage maintained on the same basis as existed on February 7, 1977, the beginning of the emergency period. All provisions of the current Agreement between the Columbus Board of Education and OAPSE, Columbus Public Schools Chapter shall continue during this emergency period, except as provided in this Memorandum of Agreement between the Columbus Public Schools Administration and the Columbus Public Schools Chapter.
(Amended Senate Bill No. 51)

AN ACT

To provide for 15 days for energy shortage school closings during the 1976-1977 school year; and to declare an emergency.

Be it enacted by the General Assembly of the State of Ohio:

SECTION 1. Notwithstanding sections 3313.48, 3313.481, 3313.482, 3313.484, 3313.485, and 3313.01 of the Revised Code, for purposes of such sections the first 15 days during the 1976-1977 school year on and after January 3, 1977 on which the schools of any school district were scheduled in the district's adopted school calendar to be open for instruction with pupils in attendance but, in the determination of the Superintendent of Public Instruction, were not so open because of a lack or potential lack of heating fuel sufficient to enable the schools to be fit for school use or because of the issuance, amendment, revision, or suspension of a rule under section 122.87 of the Revised Code, shall be deemed to be days the schools were open for instruction with pupils in attendance. Except as otherwise provided in Section 2 of this act, all persons employed by a board of education and scheduled to work on such days but not required by the board to so work shall, for purposes of all provisions of Title XXXIII and Chapter 4141. of the Revised Code and any agreements adopted under such title or chapter, be deemed to have been employed and to have worked on such day for the same number of hours they were scheduled or would ordinarily have been required to work on such day, as determined by the Superintendent of Public Instruction.

SECTION 2. Section 1 of this act does not prohibit a board of education from requiring any employee scheduled to work on any day scheduled in its adopted school calendar as a day the schools are to be open for instruction with pupils in attendance to work on such day, nor does it affect any provision of existing law or any agreement adopted thereto if an employee does not work the number of hours required by the board on such day.

SECTION 3. This act is hereby declared to be an emergency measure necessary for the immediate preservation of the public peace, health, and safety. The reason for such necessity lies in the
fact that the immediate action is necessary to permit school districts
to close schools because of fuel shortages without jeopardizing their
financial conditions by eliminating the need for employees to receive
or employers to pay unemployment compensation benefits for 15
days of fuel shortage closings, giving employees full pay and other
remuneration for such days if they are not required to work, and
requiring any fuel closings in excess of the 15 extra days granted
by this act to be made up prior to July 1, 1977. Therefore, this act
shall go into immediate effect.

Speaker of the House of Representatives.

President of the Senate.

Passed, 1977

Approved, 1977

Governor.

This act is not of a general and permanent nature and does
not require a code section number.

Director, Legislative Service Commission.

Filed in the office of the Secretary of State at Columbus,
Ohio, on the day of, A. D. 1977.

Secretary of State.
AN ACT

To provide for 16 days for energy shortage school closings during the 1976-1977 school year, and to declare an emergency.

Introduced by


Passed by Senate,

February 2, 1977

Passed by the House of Representatives,

February 2, 1977

Filed in the office of the Secretary of State at Columbus, Ohio, on the
day of ________, A.D. 1977

Secretary of State.

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<td>1. Residential and human needs</td>
<td>0 %</td>
<td>0 %</td>
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<td>2. Commercial and Industrial using over 200 Mcf a month (excluding industrial food processing)</td>
<td>0 %</td>
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<td>30 % (Max)</td>
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<td>3. Large Commercial</td>
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<td>50 %</td>
<td>85 %</td>
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<td>4. Large Non-Substitutable Industrial Loads (Million or more a month) - Excluding Food Processors</td>
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<td>6. Large industrial boiler loads</td>
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No. of Customers Affected: 1,650 industrial; 13,300 commercial

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<tbody>
<tr>
<td>1. Residential and human needs</td>
<td>0 %</td>
<td>0 %</td>
<td>0 %</td>
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<tr>
<td>2. Remaining commercial loads</td>
<td>0 %</td>
<td>0 %</td>
<td>0 %</td>
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<tr>
<td>3. Remaining industrial loads</td>
<td>0 %</td>
<td>0 %</td>
<td>100 %</td>
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<tr>
<td>4. Remaining large industrial loads</td>
<td>40 %</td>
<td>65 %</td>
<td>100 %</td>
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<tr>
<td>Large Commercial loads except schools</td>
<td>40 % (Max)</td>
<td>40 % (Max)</td>
<td>40 % (Max)</td>
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<tr>
<td>Schools</td>
<td>10 % (Max)</td>
<td>10 % (Max)</td>
<td>10 % (Max)</td>
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<tr>
<td>5. Large industrial boiler loads with installed alternate fuel capability</td>
<td>100 %</td>
<td>100 %</td>
<td>100 %</td>
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No. of Customers Affected: 370 industrial, 416 commercial

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<tbody>
<tr>
<td>1. Residential and human needs</td>
<td>0 %</td>
<td>0 %</td>
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<tr>
<td>2. Remaining Commercial Loads</td>
<td>0 %</td>
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<td>0 %</td>
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<tr>
<td>3. Small Industrial Loads</td>
<td>0 %</td>
<td>0 %</td>
<td>0 %</td>
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<tr>
<td>4. Large Commercial Loads</td>
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<td>0 %</td>
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<tr>
<td>5. Large Industrial Loads with Alternate Fuel Capability</td>
<td>0 %</td>
<td>20 %</td>
<td>100 %</td>
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<td>6. Large Industrial Boiler Loads</td>
<td>90 %</td>
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No. of Customers Affected: 27 industrial, zero commercial
COLUMBIA GAS OF KENTUCKY

1. Residential and human needs 0 % 0 % 0 %
2. Remaining Commercial loads 0 % 0 % 35 %
3. Small Industrial Loads 0 % 0 % 100 %
4. a. Large Commercial Loads 10 % 40 % 100 %
   b. Large Industrial Loads without alternate fuel capability 10 % 55 % 100 %
5. Large Industrial Loads With Alternate Fuel Capability 100 % 100 % 100 %
6. Large Industrial Boiler Loads 100 % 100 % 100 %

No. of Customers Affected: 92 industrial, 10,115 commercial

COLUMBIA GAS OF WEST VIRGINIA

1. Residential and small commercial 0 % 0 % 0 %
   (Less than 50 Mcf/day)
2. (a) Firm industrial & commercial plant protection 0 % 0 % 60 %
   (b) Large commercial loads (50 Mcf/day) 0 % 0 % 100 %
   (c) Small firm industrial loads (up to 300 Mcf/day) 0 % 0 % 100 %
   (d) Firm industrial feedstock and processing loads not specified in 2(a) and 2(b) 50 % 65 % (Jan. 16) 100 %
3. All Industrial requirements not listed in 2, 4 or 5. 100 % 100 % 100 %
4. Large firm industrial boiler loads (More than 1,500 Mcf/day) with alternate fuel capability 100 % 100 % 100 %
5. Large firm industrial boiler loads (3,000 Mcf/day) with alternate fuel capability. 100 % 100 % 100 %

No. of Customers Affected: 190 industrial, 200 commercial.
COLUMBIA GAS OF VIRGINIA

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<td>1. Residential and human needs without alternate fuel capability</td>
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<td>0%</td>
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<tr>
<td>2. Small Commercial and Industrial Requirements without Alternate Fuel capability</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>3. Large Commercial and Industrial Requirements without Alternate Fuel Capability</td>
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<td>0%</td>
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<tr>
<td>4. Requirements for Human Needs with Alternate Fuel Capability</td>
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<tr>
<td>5. Requirements with Alternate Fuel Capability not under other categories</td>
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<td>100% (Jan. 20)</td>
<td>100%</td>
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<tr>
<td>6. Large boiler fuel requirements</td>
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<td>100%</td>
<td>100%</td>
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<tr>
<td>7. Interruptible (all classes)</td>
<td>100%</td>
<td>100%</td>
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</tbody>
</table>

No. of Customers Affected: 49 industrial, 47 commercial
COLUMBIA GAS OF NEW YORK  (announced 1/25/77)

1. Residential and Human Needs
   Nov. 1, 1976: 0 %  
   Jan. 1, 1977: 0 %  
   Feb. 1, 1977: 0 %

2. Remaining school loads
   Nov. 1, 1976: 0 %  
   Jan. 1, 1977: 0 %  
   Feb. 1, 1977: 0 %

3. Remaining Small Commercial
   and Industrial Loads
   Nov. 1, 1976: 0 %  
   Jan. 1, 1977: 0 %  
   Feb. 1, 1977: 0 %

4. a. Remaining Large Commercial
      and Industrial Loads
       Nov. 1, 1976: 0 %  
       Jan. 1, 1977: 0 %  
       Feb. 1, 1977: 15 %
   b. Schools
      Nov. 1, 1976: 0 %  
      Jan. 1, 1977: 0 %  
      Feb. 1, 1977: 15 % (Max.)

5. Customers curtailed during
   1974-75 winter
   Nov. 1, 1976: 0 %  
   Jan. 1, 1977: 60 %  
   Feb. 1, 1977: 100 %

6. Customers (all classes) with
   installed dual fuel capability
   Nov. 1, 1976: 50 %  
   Jan. 1, 1977: 100 %  
   Feb. 1, 1977: 100 %

No. of Customers Affected: 35 industrial, 109 commercial
## Weekly Weather Comparison for Calendar Period November, 1976 to Date With USWB Normals and Actual Weather for Same Period Last Year

<table>
<thead>
<tr>
<th></th>
<th>November</th>
<th>December</th>
<th>January</th>
<th>February through 2/13</th>
<th>Season to Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal DDDs</td>
<td>702</td>
<td>1,077</td>
<td>1,161</td>
<td>478</td>
<td>3,418</td>
</tr>
<tr>
<td>Actual DDDs Last Year</td>
<td>558</td>
<td>1,020</td>
<td>1,311</td>
<td>496</td>
<td>3,385</td>
</tr>
<tr>
<td>Actual DDDs This Year</td>
<td>949</td>
<td>1,284</td>
<td>1,657</td>
<td>552</td>
<td>4,442</td>
</tr>
</tbody>
</table>

Percent Actual Deviation For This Year Compared to:

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Normals</td>
<td>35.2%</td>
<td>19.2%</td>
<td>42.7%</td>
<td>15.5%</td>
<td>30.0%</td>
</tr>
<tr>
<td>Last Year</td>
<td>70.1%</td>
<td>25.9%</td>
<td>26.4%</td>
<td>11.3%</td>
<td>31.2%</td>
</tr>
</tbody>
</table>

2/15/77
Engineering and Planning Department
FOR USE AFTER 2 P.M. MONDAY, FEB. 21, 1977

Substantial conservation by residential and small commercial gas consumers and some improvement in gas supply will enable Columbia Gas of Ohio to make more natural gas available to large commercial users -- including schools -- and large industries that cannot use an alternate fuel.

The company announced today that, beginning Mar. 1 and until further notice, curtailment of commercial customers that use more than a million cubic feet of gas a month will be reduced from 85 to 50 per cent. Curtailment of large industrial uses without alternate fuel capability will be reduced from 85 to 70 per cent.

Other curtailment the company currently has in effect will not change.

Today's action is being taken under new curtailment guidelines established Friday (Feb. 18) by the Ohio Public Utilities Commission at the request of Columbia Gas.

Marvin E. White, Columbus, chairman of the board of Columbia Gas of Ohio, said it would be impossible for Columbia to predict what impact this change will have on operations of individual schools, businesses and industries.

"Each customer will have to evaluate the amount of gas made available by this change and how it effects facilities and operations. Some may be able to resume operations immediately; others may not be able to reopen at all," White said.

21/4 more -
White praised Columbia's one million residential and small commercial gas customers throughout the state for their conservation efforts. He said Ohioans can be proud of their contribution to helping overcome the severe energy shortages brought about by the coldest winter in the history of Ohio and the nation.

He stressed that it would be necessary for Columbia's customers to continue to keep thermostats turned back if the company is to continue to provide the additional gas to those schools, businesses and industries that need it so desperately.
DEPARTMENT OF RECREATION AND PARKS

EDUCATION PROGRAM OFFERING

I. INDOOR EDUCATIONAL PROGRAMS (Using unheated facilities: schools, recreation centers, etc.)

A) Introduction to First Aid and Care of Injuries:

1. Consideration of the methods of prevention and care of injuries, conditioning of athletes and safety provisions

2. Basic first aid instruction in accordance with Red Cross guidelines and standards

B) Elementary Principles and Techniques of Drama:

1. Course to include instruction and participation in acting, stagecraft, sets and lighting, direction, mime, creative dramatics, stage movement and comedy

2. Field trips may be included

C) Basic Experiences in Music:

1. Course primarily deals in group singing, musical games, instrumental practice, discussion of music history, fundamental music techniques and choral organization

D) Introduction to Everyday Mechanics and Equipment Maintenance

1. Lecture/Demonstration class on basic mechanical techniques with respect to maintenance and repair of the following:
   - Bicycles
   - Gasoline Engines
   - Automobiles
   - Tractors
   - Heavy Equipment
   - Motorcycles
   - Trucks
   - Vans

2. Basic identification and instruction in the use of small tools and shop equipment

E) Fundamental Dancing Techniques

1. Study of basic dance movements to include:
   - Modern
   - Popular Dance
   - Square and Folk
   - Tap
   - Afro-American
   - Cheerleading

2. Instruction to include demonstration, interpretation and participation
F) Introduction to Physical Fitness and Conditioning

1. Calisthenics, Free Exercise and Rope Jumping

2. Basic Indoor Sports Skills (Basketball, Volleyball, Group Games)

G) Group Experiences in Creative Skills

1. Course to be offered in conjunction with the Department of Recreation and Parks Senior Citizen/Arts and Crafts Program

2. Instruction and participation in the following areas:

   - Handcrafts
   - Drawing
   - Metal Work
   - Carving

   - String Art
   - Needlecrafts
   - Woodworking
   - Glasswork

   - Ceramics
   - Painting
   - Cooking
   - Weaving

3. Field trips may be included

H) Orientation in Sports Officiating

1. Clinics will be offered for the study of playing rules, rule interpretation, techniques and mechanics of officiating organized softball and basketball programs

I) Basic Gymnastics and Human Body Movement

1. Instruction to include demonstration and participation

2. Tumbling, floor exercises

3. Parallel bars, balance beams, trampoline

4. Basic body control and movement
II. OUTDOOR EDUCATIONAL PROGRAMS (To be operated at various Recreation and Park facilities)

A) Basic Techniques in Outdoor Survival
   1. This multi-faceted course will primarily be concerned with outdoor survival during sub-freezing weather
   2. Survival training will include:
      - Orienteering
      - Winter Camping
      - Hiking Techniques
      - Backpacking
      - Camperafts
      - Skills

B) Nature Study and Interpretation
   1. This course will provide students with first-hand, on-the-site experience in conjunction with the Franklin County Metropolitan Park program
   2. Studies will include wildlife and plant identification, field trips, lecture and instruction by park naturalist

C) Techniques in Forestry and Arboriculture
   1. Course will include basic instruction on the value of trees and wood products, tree identification, tree trimming and pruning, nursery management and tree removal
   2. Program will include field work and participation with regard to forestry activities

D) Group studies in Horticulture and Gardening
   1. Course will include basic instruction and participation in areas of horticulture to include:
      - Gardening techniques
      - Seed Selection
      - Landscaping
      - Indoor garden activities
      - Plant Identification
      - Planting/potting
   2. Course will include field trip and course work at the Franklin Park Conservatory

E) Introduction to Outdoor Winter Sports and Activities
   1. Course to include instruction and participation in the following winter activities:
      - Ice skating
      - Sledding
      - Ice fishing
      - Snow sculpture
      - Ice hockey
      - Winter games
      - Snow skiing
   2. Course will include demonstration as well as participation
III. SPECIAL EDUCATIONAL PROGRAMS (Using special facilities within Columbus)

A) Studies in Zoological and Environmental Ecology

1. Course to include lecture, field trip and indepth analysis of Columbus Zoo facilities to include:
   - Tour of Zoo displays by qualified Zoological Guide
   - Identification and study of Zoo animals and their environment
   - Examination of Zoo maintenance facilities and Zoo management program

B) Principles of Science and Industry

1. Course work to be conducted at the Center of Science and Industry (COSI) in conjunction with COSI staff

2. Program to include tour and explanation of COSI exhibits, historic background of science and industry, discussion of past-present-and future with respect to Columbus, Ohio

C) Principles of Landscape Architect and Park Planning

1. Course to include lecture, instruction and tour of area examples of park development and landscape architecture

2. Topics to include park design, landscape principles, survey and map work, residential landscape design and playground development

D) Introduction to Employment and the Job Market

1. Course to include simulation of real life employment circumstances to include personnel interview, job classifications, employment potential, i.e.; what is expected in the real world

2. Program will be centered around public job classifications with tours and guest speakers available as required
SUMMARY OF EDUCATIONAL PROGRAM OFFERINGS
DEPARTMENT OF RECREATION AND PARKS

I. INDOOR EDUCATIONAL PROGRAMS

A. Intro. to first aid and care of injuries
   4 sites at 50 participants/site  
   200

B. Elem. Princ. and Techniques of Drama
   2 sites at 75/site  
   150

C. Basic Experiences in Music
   4 sites at 100/site  
   400

D. Intro. to Everyday Mechanics & Equipment Maint.
   1 site (service complex) at 150/site  
   150

E. Fund. Dancing Techniques
   4 sites at 100/site  
   400

F. Intro. to Physical Fitness & Conditioning
   6 sites at 100/site  
   600

G. Group Experience in Creative Skills
   6 sites (senior citizen centers) at 50/site  
   300

H. Orientation in Sports Officiating
   9 sites at 50/site  
   100

I. Basic Gymnastics and Human Body Movement
   4 sites at 50/site  
   200

Total Indoor Program 2,500
per Class
II. OUTDOOR EDUCATIONAL PROGRAMS

A. Basic Techniques in Outdoor Survival
   3 sites at 50/site
   Sites: Big Walnut Zone (Three Rivers Park)
   Big Run Zone (Big Run Park)
   Indian Village Camp (Griggs Reservoir)
   Est. No. of Participants 150

B. Nature Study and Interpretation
   4 sites
   Sites: McVay Farm Lodge (200)
   Blacklick Woods Lodge (100)
   Darby Lodge (100)
   Blendon Woods - outside (50)
   Est. No. of Participants 450

C. Techniques in Forestry & Arboriculture
   1 site (Hort & Fort) at 50
   Est. No. of Participants 50

D. Group Studies in Hort & Gardening
   1 site (Conservatory) at 200
   Est. No. of Participants 200

E. Intro to Outdoor Winter Sports & Activities
   5 sites (shelterhouses) at 50
   (Westgate, Whetstone, Southview, Goodale, Wolfe)
   Est. No. of Participants 250

Total Outdoor Programs
Per Class 1100
### SPECIAL EDUCATIONAL PROGRAMS

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
<th>Site</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Studies in Zoological &amp; Environmental Ecology</strong></td>
<td>1 site (Columbus zoo) 20 tours at 50/tour</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td><strong>B. Principles of Science &amp; Industry</strong></td>
<td>1 site (COSI) at 1000/class</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td><strong>C. Principles of L.A. &amp; P.P.</strong></td>
<td>4 buses at 50/bus</td>
<td></td>
<td>200</td>
</tr>
<tr>
<td><strong>D. Intro. to Employment &amp; Job Market</strong></td>
<td>Need Big Site at 500/class</td>
<td></td>
<td>500</td>
</tr>
</tbody>
</table>
WHEREAS, pursuant to Ohio Revised Code Section 122.86, Governor James A. Rhodes has declared an energy emergency; and

WHEREAS, Governor James A. Rhodes has asked all Mayors to proclaim emergencies within their respective jurisdictions and to call on residents to comply with the conservation requests made by him; and

WHEREAS, the health, safety, and welfare of the citizens of the State of Ohio and of the City of Columbus are threatened by reason of a shortage of natural gas; and

WHEREAS, Columbus City Codes, Section 123.01, provides the circumstances under which the Mayor of the City may proclaim the existence of a state of emergency:

NOW, THEREFORE, I, Tom Moody, Mayor of the City of Columbus, Ohio, do hereby proclaim that an emergency exists with regard to the shortage of natural gas, which said emergency substantially impairs the functioning of the city government and its ability to protect the lives and property of the people of Columbus.

Accordingly, I do call upon all residents of the City of Columbus, Ohio, to conserve natural gas in every possible way, including:

1. Reduction of all residential heating to 65 degrees during the day and 55 degrees at night.
2. The closing off of all unused rooms.
3. The supplementing of heating by using alternate forms of heating if available.
4. Reducing temperature to 45 degrees in unused or little used facilities, such as residences when the occupants are away on vacation.
5. Reduction of the temperature in all office buildings, commercial establishments, and schools to 65 degrees during the day and 55 degrees at night.
6. The use of any other means to prevent heat loss which are reasonable and appropriate under the circumstances, and which do not substantially impair health, life, or property.
I further proclaim that City Hall is established as emergency headquarters to deal with all human and logistic emergencies which may occur locally. I further proclaim that all departments and divisions of the City shall be regarded as headquarters for such human and logistic emergencies as may come within the scope of their duties, and that any such emergencies coming to their attention but not within the normal scope of their duties be referred immediately to the directors of the respective departments. I further proclaim that the Mayor and the cabinet of the City of Columbus shall constitute an Emergency Committee to coordinate all city services during the period of emergency. I further proclaim that all existing human service agencies within the City of Columbus are an important part of the private and governmental partnership which constitutes our human-services delivery system and I call upon each of such agencies to devote itself to the relief of human needs arising as a result of this state of emergency.

I urge all citizens who encounter a problem to contact directly the service agency most directly concerned with the particular problem.

The State of Emergency shall be deemed to continue until further order.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Great Seal of the Mayor of the City of Columbus, Ohio, to be hereto affixed this 24th day of January, 1977.

[Signature]

TOM MOODY, Mayor
ENERGY CRISIS

The Department of Recreation and Parks has initiated the following action with respect to the current energy crisis:

1) All recreation and community centers have thermostats set at 42° or lower during program hours. All hot water tanks have been shut down.

2) All Saturday morning recreation programs have been discontinued until further notice. As a result of this action, facilities will not be heated during non-program hours and on weekends except for heating requirements to insure that the plumbing does not freeze or become damaged. Due to the construction of our facilities, it is impossible in many cases to drain water pipes and temperatures must be maintained at a minimum of 40°. Even at these extreme temperatures, our Adult Sports Section noted that during the weekend when temperatures dipped below zero and our gymnasiums were between 40°-45°, 56 of the 58 scheduled teams showed up and participated in our industrial league basketball program.

3) Enclosed shelterhouses at Westgate, Goodale, Southview and Whetstone Parks have been closed and winterized until further notice.

4) Golf Clubhouses/Maintenance areas have been closed and all golf maintenance personnel have been centralized at the rear maintenance area at Airport Golf Course.

5) The Columbus Indoor Swim Center, our largest single recreation area with respect to gas consumption, has been closed and winterized until further notice.

6) The Franklin Park Conservatory, the largest park gas consumer, has been totally converted to fuel oil.

7) All park zone headquarters have been weatherized with major heating units and hot water tanks shutdown. Auxiliary heating equipment is being used. Zone crews are reporting to the nearest recreation center to minimize heating needs at zone buildings.

8) The Department of Recreation and Parks has operated on a "pooled" basis with regard to gas allocation since 1973. Through on-going energy saving steps, our department was able to save on gas consumption during the 1975-1976 season by 30.9% below our curtailed allocation level. Due to the extreme weather and limited natural gas availability, our department has initiated a number of additional procedures and guidelines aimed toward energy savings. We currently are operating at approximately 9.5% below our current curtailment level. However, we anticipate additional curtailment on various facilities which will require the cooperation of Recreation and Park staff and participants if we are to continue our programs.

January 27, 1977
FOR IMMEDIATE RELEASE
JANUARY 28, 1977

Due to the severe weather situation and extreme travel conditions, the Department of Recreation and Parks has announced the closing of the following facilities and programs effective 12:00 Noon, Friday - January 28, 1977:

ALL RECREATION CENTERS
ALL SENIOR CITIZENS CENTERS
THE ARTS AND CRAFTS CENTER
ALL SCHEDULED ADULT SPORTS LEAGUES AND PERMITS
ALL ICE SKATING LAKES

Facilities and programs will remain closed throughout the weekend and until further notice.
DEPARTMENT OF RECREATION AND PARKS
SUMMARY OF ENERGY CRISIS

1. THIS AFTERNOON, I HAD DELIVERED TO SCHOOL SUPERINTENDENT JOHN ELLIS, A LIST OF RECREATION AND PARK FACILITIES HEATED BY ALTERNATE FUEL SOURCES WHICH WILL BE AVAILABLE FOR USE BY THE BOARD OF EDUCATION ALONG WITH A PROGRAM OUTLINE FOR A VARIETY OF EDUCATIONAL/LEARNING EXPERIENCE CLASSES AND RECREATION AND PARKS DEPARTMENT PERSONNEL WHICH CAN BE COORDINATED WITH THE COLUMBUS PUBLIC SCHOOL EDUCATIONAL PROGRAM.

2. PERSONNEL AT THE COLUMBUS ZOO HAVE CONSTRUCTED WIND BREAKS WITH BALES OF HAY AND STRAW FOR OUTDOOR DISPLAY ANIMALS. ALL ANIMALS ARE REPORTED DOING FINE WITH THE POLAR BEARS PARTICULARLY ENJOYING THIS "BREAK IN THE WEATHER". THE MAJOR ENERGY SOURCE FOR ZOO FACILITIES IS FUEL OIL, AND THE SUPPLY IS REPORTED TO BE ADEQUATE FOR THIS CRISIS PERIOD.

3. ALL RECREATION AND PARKS PROGRAMS HAVE BEEN CLOSED INCLUDING ALL SENIOR CITIZEN CENTERS, THE ARTS AND CRAFTS CENTERS, ALL ICE-SKATING LAKES AND ALL SCHEDULED ADULT SPORTS LEAGUES AND GYMNASIUM PERMITS UNTIL FURTHER NOTICE.

4. SENIOR CITIZENS LIVING ALONE SHOULD BE CONTACTED BY FRIENDS AND NEIGHBORS ON A DAILY BASIS DURING THIS CRISIS PERIOD TO INSURE THAT THEIR NEEDS ARE BEING MET.

5. EMERGENCY ASSISTANCE TELEPHONE NUMBERS FOR THE GENERAL PUBLIC REQUIRING INFORMATION OR ASSISTANCE ARE:
   CITY OF COLUMBUS - (461-5671)
   STATE OF OHIO TOLL FREE LINE - (1-800-282-9234)
THE FOLLOWING INFORMATION HAS NOT BEEN DISTRIBUTED TO THE GENERAL PUBLIC SINCE IT IS PART OF OUR EMERGENCY CONTINGENCY PLAN:

1. RECREATION AND PARKS ENCLOSED SHELTERHOUSES AND LODGE FACILITIES ARE CURRENTLY STOCKPILED WITH FIREWOOD AND WILL BE MADE AVAILABLE ON AN EMERGENCY BASIS AS REQUIRED BY RED CROSS.

2. RECREATION AND PARKS HEAVY EQUIPMENT, TRANSPORTATION VEHICLES AND STAFF ARE AVAILABLE ON AN EMERGENCY BASIS TO ASSIST IN TREE REMOVAL, SNOW REMOVAL AND TRANSPORTATION OF FOOD AND/OR PEOPLE AS REQUIRED BY RED CROSS.

3. FOOD STOCKS ARE CURRENTLY AVAILABLE ON AN EMERGENCY BASIS IN CONJUNCTION WITH PROJECT NICE AND CAN PROVIDE UP TO 24,000 MEALS AS REQUIRED BY RED CROSS.
OFFICE OF THE MAYOR

TO: Bernard T. Chupka, Charles Wenner, Melvin B. Dodge, Michael J. Gable, N. Jack Huddle, Robert C. Parkinson, Ronald J. Rotaru, Robert W. Newlon, Odella T. Welch, Dale Crawford, Dr. W. E. Brown

FROM: Tom Moody, Mayor

Attached is a copy of a request received shortly after noon, February 1, 1977. I urgently request your utmost cooperation in preparing a response.

I request Director Robert W. Newlon to act as coordinator for the receipt of information from all city departments and charge him with the responsibility of preparing a single combined report.

In the event that there has been no impact on your particular department, please notify Mr. Newlon by written message.

I should like all material to be hand-carried to Director Newlon's office by noon, February 2. It is recognized that the answers to some of these questions will be impossible for us to formulate, but I will not recognize this as an excuse for failure to reply. For preliminary purposes, I request that the Department of Development attempt to respond to items 2, 3, 15, 16 and 17 from any sources that are available. I request that the Department of Public Service respond to items 7, 8, 9, 12 and 18 from whatever sources are available. I request that the Department of Recreation and Parks respond to items 10, 11, 13 and 14. I request that the Department of Public Safety respond to item 11 and communicate any information to the Department of Recreation and Parks for inclusion in their report. All departments should respond to items 4, 5 and 6.

The preliminary assignments of these areas of responsibility is for convenience only. If you have any information affecting any of these areas, which areas have not been assigned to you, please communicate that information to the assigned department.
Director Newlon is requested to prepare and deliver the completed preliminary report to Director Chupka in sufficient time to permit communication by Leeds Teletype to the Disaster Services Agency and to the Ohio Department of Highway Safety prior to midnight, February 2. Without further instruction or reminder, all departments are charged with updating this information and delivering it to Director Newlon's office by noon, February 14. Director Newlon is requested to prepare the written confirmation at that time for delivery to the Disaster Services Agency not later than February 15. I request that Director Newlon forward a copy of both the February 2 and February 15 reports to all persons to whom this memo has been sent.

TM: pm
Enc.

cc: J. C. Gafford
GOVERNOR JAMES C. RHODES REQUESTS THAT THE FOLLOWING MESSAGE BE TRANSMITTED BY THE MOST EXPEDIENT MEANS TO ALL MAYORS AND COUNTY COMMISSIONERS IN OHIO.

TO: ALL MAYORS AND COUNTY COMMISSIONERS IN OHIO
FROM: JAMES C. CLEM, DIRECTOR OF DISASTER SERVICES AGENCY

IN ORDER TO ASSESS DAMAGE SINCE THURSDAY, 27 JANUARY 1977, RELATED TO THE WINTER STORM, TO REQUEST FEDERAL ASSISTANCE, WE NEED PRELIMINARY DAMAGE ESTIMATES NO LATER THAN MIDNIGHT, 2 FEBRUARY, 1977. THE FOLLOWING INFORMATION IS REQUESTED TO BE INCLUDED IN YOUR PRELIMINARY ESTIMATES:

1. NAME OF CITY OR COUNTY
2. POPULATION
3. ESTIMATED NUMBER OUT OF WORK ONE OR MORE DAYS
4. OVERTIME PAY TO CITY, COUNTY OR TOWNSHIP EMPLOYEES, RELATED TO STORM
5. COST OF RENT OF EQUIPMENT
6. COST OF FUEL, PARTS AND REPAIRS TO EQUIPMENT ABOVE NORMALLY BUDGETED COSTS
7. THE NUMBER OF KNOWN BROKEN WATER MAINS OCCURRING IN JANUARY, 1977
8. NUMBER OF KNOWN BROKEN WATER MAINS REPAIRED IN JANUARY, 1977
9. NUMBER OF BROKEN WATER MAINS IN JANUARY, 1976
10. COST OF MASS CARE AND FEEDING
11. SEARCH AND RESCUE COSTS
12. DAMAGE TO PUBLIC BUILDINGS OR FACILITIES
13. NUMBER OF PEOPLE IN SHELTER AND HOW LONG
14. NUMBER OF PEOPLE STILL IN SHELTER
15. NUMBER OF BUSINESSES INTERRUPTED AND HOW LONG
16. PROVIDE HOUSES DAMAGED
17. FARM OR LIVESTOCK LOSSES
18. ESTIMATED DAMAGE TO ROADS, STREETS, AND BRIDGES

PLEASE FORWARD ABOVE ESTIMATES TO DISASTER SERVICES AGENCY / OHIO DEPARTMENT OF HIGHWAY SAFETY - (VIA LEADS TELETYPES /OHLEADSCY).

WE REALIZE THAT THE REQUESTED ESTIMATES WILL NOT BE FULLY ACCURATE OR COMPLETE, AND THAT THE BURDEN IS GREAT, BUT NEED BEST INFORMATION POSSIBLE BY THE DEADLINE IN ORDER TO EXPEDITE GOVERNOR'S REQUEST FOR ASSISTANCE.

REQUEST PRELIMINARY ESTIMATES BE CONFIRMED IN WRITING WITH INFORMATION AS ACCURATE AND COMPLETE AS POSSIBLE TO OHIO DISASTER SERVICES AGENCY, 2825 WEST GRANVILLE ROADS, WORTHINGTON, OHIO 43085, NOT LATER THAN 15 FEBRUARY, 1977. IF NO RESPONSE BY DEADLINE, WE WILL ASSUME NO DAMAGE.

MAJOR GENERAL JAMES C. CLEM
ADJUTANT GENERAL
DIRECTOR OF DISASTER SERVICES

(END PAGE 2 OF 2)
February 14, 1927.

Major General James Clem
Adjutant General of Ohio
Director of Disaster Services

Dear Sir:

As a follow-up answer to your message of February 1, 1977 to Mayor Moody, attached are supplemental answers to your 18 categories.

Answers to the questions regarding unemployment are still incomplete and probably can be best answered by the Bureau of Unemployment Compensation.

Damage to public buildings, so far discovered, has been slight, but the damage to our streets has been estimated at ten times that of recent winters. Temporary repairs have been attempted but are unsatisfactory due to the freezing and thawing, and our steel cover plates have long since been put to use. Guard devices, lights and traffic directors are being used. Suits against the City have been threatened by motorists for both car and personal injury.

The extent of damage due to frozen pipes and water lines is not fully known, but reports continue to come in.

I trust this answers your questions, but if there are any specifics or additional information needed, please call me.

Yours very truly,

Robert W. Newldon
Director
QUESTION

1
Columbus

2
Previously answered

3
Estimated Number out of work one or more days.

Community Services Department reports 13 businesses connected with it down for a total of 30 days.

During the week ending February 5, 1977, 5,092 people filed initial unemployment claims in Franklin County. Of these, 3,492 were energy related job losses. This shows a marked increase over the 298 persons newly unemployed for energy related reasons for the week ending January 29, 1977.

The total number of claimants in Franklin County who were unemployed one week or more was 12,814 as of January 29, 1977.

4
Overtime pay to City employees related to storm.

Workhouse $223.20
Police - Investigative Section $3,571.36
Police - Headquarters - Service Bureau $1,643.24
Police - Administrative $138.24
Police - regular $162.12
Police - Fire, Crisis Center $548.95
General police overtime to close down
Columbus Hotel, Krumm Shelter House, escorts of snow plows & stranded motorists. "B" Co. $1,921.21
Same for "C" Co. $1,452.84
Freeway Patrol $854.33
Marine & Park Patrol $49.63
SWAT Platoon $205.15
Helicopter service $604.24
Health Dept. - February 2 - 14 $307.84
Recreation - Parks $1,500.00
Development Department $854.39

5
Cost of Rent of Equipment

Community Services $200.00
6. **Cost of fuel, parts and repairs above usual budget.**

<table>
<thead>
<tr>
<th>Department</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recreation &amp; Parks Department</td>
<td>$1,200.00</td>
</tr>
<tr>
<td>Division of Fire</td>
<td>$1,183.49</td>
</tr>
<tr>
<td>Fire Prevention Bureau</td>
<td>$1,459.75</td>
</tr>
<tr>
<td>Workhouse report cement walks raised by freeze but no estimate on cost</td>
<td></td>
</tr>
<tr>
<td>Police Jail Bureau</td>
<td>$231.00</td>
</tr>
<tr>
<td>Police-Administrative</td>
<td>$1,640.00</td>
</tr>
<tr>
<td>Police - Regular</td>
<td>$219.70</td>
</tr>
<tr>
<td>Police-Fire, Crisis Center</td>
<td>$549.00</td>
</tr>
<tr>
<td>Community Services</td>
<td>$11,400.00</td>
</tr>
<tr>
<td>Service Department - Equipment Parts</td>
<td>$12,900.00</td>
</tr>
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</table>

7. **Number of known broken water mains in January, 1977.**

   As Before

8. **Number of known broken water mains repaired in January.**

   As Before

9. **Number of broken water mains in January, 1976.**

   73

10. **Cost of mass care and feeding.**

    | Location                          | Amount    |
    |-----------------------------------|-----------|
    | Krumm Recreation Center           | $1,500.00 |
    | Community Services                | $3,250.00 |

11. **Search and rescue costs.**

    Police - Fire Crisis Center      | $363.50   |

12. **Damage to public buildings and facilities.**

    Health Department                | $175.00   |

13. **Krumm Recreation Center, 854 Alton Avenue (opened Friday, January 28, as emergency Red Cross shelter)**

    | Date                      | Number of People | Time          |
    |----------------------------|------------------|---------------|
    | Friday, January 28        | 10 people        | 9:00 p.m.     |
    | Saturday, Jan. 29         | 25 people        | 9:00 p.m.     |
    | Sunday, January 30        | 25 people        | 9:00 p.m.     |
    | Sunday, January 30        | 47 people        | 12:00 midnight|
    | Monday, January 31        | 46 people        | 4:00 p.m.     |
    | Tuesday, Feb. 1           | 45 people        | 4:00 p.m.     |
    | Wednesday, Feb. 2         | 27 people        | 4:00 p.m.     |
    | Thursday, Feb. 3          | 22 people        | 4:00 p.m.     |
    | Friday, Feb. 4            | 7 people         | 4:00 p.m.     |
    | Saturday, Feb. 5          | 0 people         | 9:00 a.m.     |
14 Number of people still in shelters.

None

15 Number of businesses interrupted and how long.

The following chart indicates the estimated effect of the winter storm and associated utility curtailments on local business establishments by sector.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Adversely Affected</th>
<th>Curtailed Production cutbacks</th>
<th>Curtailed By 85 percent</th>
<th>Total Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>740</td>
<td>740</td>
<td>202*</td>
<td>740</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>4,403</td>
<td>3,522</td>
<td>171</td>
<td>4,403</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>980</td>
<td>588</td>
<td>48</td>
<td>980</td>
</tr>
<tr>
<td>Selected Services</td>
<td>4,424</td>
<td>3,539</td>
<td>171</td>
<td>4,424</td>
</tr>
<tr>
<td>Other</td>
<td>475</td>
<td>250</td>
<td>11</td>
<td>500</td>
</tr>
<tr>
<td>Totals</td>
<td>11,022</td>
<td>8,639</td>
<td>603</td>
<td>11,047</td>
</tr>
</tbody>
</table>

*Industrial customers have been curtailed by 30% to 100% depending on the nature of manufacturing operations.

16 Provide houses damaged.

Information not yet available.

17 Farm or livestock damage.

Livestock losses:

Beef

Milk Cows

Hogs (feeder pigs)

Farrowing (baby pigs)

Sheep and lambs

Unit loss - 266 / Value - $19,913

Unit loss - 75 / Value - $5,625

Unit loss - 177 / Value - $2,380

Unit loss - 873 / Value - $12,222

Unit loss - 540 / Value - $10,800

Milk Production:

Milk which had to be dumped because farms could not be reached: Unit loss - 2,185 gallons Value - $17,500

Poultry:

Laying Hens

Unit loss - 14,841 dozen eggs Value - $11,131
Other:

- Pasture fences: $6,000
- Building losses: $8,000
- Greenhouse & nursery stock losses: $29,000

Total: $122,570

The animal losses are attributed mainly to extremely cold temperatures and storms. This is the primary season for birth of young animals so farms were particularly hard hit. Another factor in animal losses was inaccessible roads which made feeding impossible at times.

Estimated damage to roads, streets and bridges.

$125,317.00 in addition to those previously reported.
February 3, 1977

Major General James Clem
Adjutant General of Ohio
Director of Disaster Services

Dear Sir:

In conformity with the message of February 1, 1977 to Mayor Moody, he directed me to obtain answers for Columbus to the 18 categories outlined, and such is attached.

Yours very truly,

Robert W. Newlon
Director

RWN/bb
The population of Columbus is now 602,630. It was 539,677 in the 1970 census. The population of Franklin County, of which Columbus is the county seat, is 911,951, of which 789,058 reside in the cities, 21,107 in the villages and 101,786 in the unincorporated areas of the county.

Estimated number out of work one or more days

Columbus has a large percentage of federal, state, county, city, university and school employees on salary. Papier's office advises 1,706 new claims filed for week ending January 29 in Franklin County and 298 of these were energy related. We expect substantially more in week ending February 5. Many of our large employers such as Lazarus and Nationwide are either on alternate fuels or have switched. Papier estimates one-third of 40,918 claims existing in Franklin County as of January 22 were related to energy crisis.

For the period January 27 to February 5, Columbia Gas took 202 industrial accounts off its lines. These accounts employed 102,000 persons. For the same period, 400 commercial accounts were told to suspend service. We do not have accurate reports as to the number who complied and the number of employees involved.

No City employee has been laid off

Overtime pay to City employees related to storm

<table>
<thead>
<tr>
<th>Department of Development overtime</th>
<th>$ 353.04</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Municipal Garage</strong></td>
<td></td>
</tr>
<tr>
<td>Overtime cost</td>
<td>$ 3,305.02</td>
</tr>
<tr>
<td>Related equipment failure</td>
<td>$ 1,000.00</td>
</tr>
<tr>
<td>Building damage</td>
<td>$ 3,000.00</td>
</tr>
<tr>
<td>Total Municipal Garage</td>
<td>$ 7,305.02</td>
</tr>
<tr>
<td><strong>Lands and Buildings</strong></td>
<td></td>
</tr>
<tr>
<td>Overtime cost</td>
<td>$ 1,590.65</td>
</tr>
<tr>
<td>Rental of equipment</td>
<td>$ 100.00</td>
</tr>
<tr>
<td>Damage to buildings: City Hall, Annex, Police Station</td>
<td>$ 3,950.00</td>
</tr>
<tr>
<td>Total Lands and Buildings</td>
<td>$ 5,640.65</td>
</tr>
<tr>
<td>Department of Recreation &amp; Parks</td>
<td>$ 850.00</td>
</tr>
</tbody>
</table>
Division of Sanitation $ 8,000.00
Street Maintenance $ 12,111.00
Airport $ 3,025.00
Water Division $ 11,025.00
Electricity Division $ 1,675.00
Department of Health $ 563.00
Workhouse $ 223.00
Fire Department $ 975.00
Police Department $ 325.00

Cost of Rent of Equipment

Sanitation $ 172.50
Street Maintenance $ 29,641.00
Airport $ 3,800.00
Water Division $ 6,941.00
Electricity Division $ 4,560.00
Community Services $ 500.00
Fire Repair & parts $ 851.00
Hydrant supplies $ 255.00

Cost of fuel, parts and repairs above usual budget

Sanitation $ 1,442.00
Traffic Engineering $ 940.00
Airport $ 1,790.00
Water Division $ 6,116.50
Electricity Division $ 463.00
Community Services $ 7,500.00
Police Department $ 1,847.00

Number of known broken water mains in January, 1977

118

Number of known broken water mains repaired in January

83

Number of broken water mains in January, 1976

73

Cost of mass care and feeding

Community Services $ 5,500.00
Krum Recreation Center $ 850.00

Search and Rescue costs

Police Department $ 3,088.24
Police Headquarters $ 1,300.00
12. **Damage to public buildings and facilities**

Sanitation: $1,335.00
Traffic Engineering: $2,120.00
Water Division: $500.00

13. **Number of persons in shelter and how long**

Krumm Recreation Center, 854 Alton Avenue (opened Friday, January 28, as emergency Red Cross shelter)

- Friday, January 28: 10 people - 9:00 p.m.
- Saturday, January 29: 25 people - 9:00 p.m.
- Sunday, January 30: 25 people - 9:00 p.m.
- Sunday, January 30: 47 people - 12:00 midnight
- Monday, January 31: 46 people - 4:00 p.m.

The Department of Health reports 77 calls during January concerning frozen water pipes in Columbus homes.

14. **Number of people still in shelter**

- 50 people as of 9:00 a.m. - February 1, 1977
- 45 people as of 4:00 p.m. - February 1, 1977

15. **Number of businesses interrupted and how long**

The following chart indicates the estimated effect of the winter storm and associated utility curtailments on local business establishments by sector.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Adversely Affected</th>
<th>Curtailed Hours and Production Cutbacks</th>
<th>Curtailed to Maintenance Level</th>
<th>Total Establishments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>740</td>
<td>740</td>
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Although the above chart indicated only numbers of business establishments experiencing cutbacks in hours of operation and production, it is assumed that all establishments in this category had service interruptions of at least one-half day.
The Community Services Department reports 13 businesses doing construction work for it were interrupted for a total of 30 days.

Provide houses damaged

The total number of houses within the City of Columbus experiencing winter storm damage, as reported by the Code Enforcement Division is 43. Of these 43 houses, 29 were damaged by water line breaks, 11 were damaged by fireplace problems, and 3 were damaged by snow load problems.

Farm or livestock damage

A representative of the Ohio Department of Agriculture assumed that livestock losses due to the recent storm and cold weather would be minimal in the Franklin County area. According to the Animal Science Department at Ohio State University, only newborn animals would experience any difficulty in surviving the cold weather. The Franklin County Extension Service was closed for the week.

The Department of Health has expressed concern over loss of milk due to road conditions and with regard to its inability to deliver normal social service to the elderly, shut-ins and the ill.

Estimated damage to roads, streets and bridges

$19,985.00
JANUARY 28, 1977

FOR INFORMATION PURPOSES:

BY ORDER OF THE MAYOR, ALL CITY HALL NON-ESSENTIAL SERVICES WILL BE ENDED AT NOON ON FRIDAY, JANUARY 28, AND PERSONNEL INVOLVED WILL BE RELEASED.

THE MAYOR'S STAFF WILL CONTINUE ON DUTY AND ALL DIRECTORS AND WHATEVER SUPPORT STAFF THEY DEEM NECESSARY WILL REMAIN ON THE JOB UNTIL FURTHER NOTICE.
February 14, 1977

MEMO TO: RALPH BANGS, PATTY MILLER, BETTY WEBER, EDIE POLING
FROM: J. C. GAFFORD
EXECUTIVE ASSISTANT TO THE MAYOR

Anticipating phone calls pursuant to chuck holes, the following response to the citizenry is appropriate.

We estimate that over $2,000,000 damage has been done to the streets so far this winter. This is five times the damage we have ever experienced before. We have 15 patch crews working full-time and they have been for almost two weeks. In the event that the caller states that they are suing, or want the City to pay for damage to their car, they can submit a letter, with a description of the incident and attach the bill or estimate for repair, to the Division of Engineering and Construction, 50 W. Broad Street, or they have the option to submit the letter directly to the City Attorney. In either event, the claim will be investigated and they will be advised accordingly.

If a caller claims water damage due to negligence of the City, the same process can be used—either going directly to the City Attorney or send the letter plus the bill or estimate to the Division of Water.

JCG/ejp

cc: T. Moody
February 7, 1977

Mr. Kline Roberts  
Columbus Area Chamber of Commerce  
50 West Broad Street  
Columbus, Ohio 43215

Dear Kline:

Attached is a copy of the telegram from Richard C. Gilliland, Regional Administrator, Employment and Training Administration, United States Department of Labor, sent February 3 to the State of Ohio. The State of Ohio has requested Mayors to assist in providing this information since state sources cover only a part of the information requested.

Confirming our telephone conversation, I respectfully request the assistance of the Columbus Area Chamber of Commerce in providing such information as you can from our largest employers. My alternative would be to have a member of my staff make daily phone calls to those employers, which I would consider to be somewhat disruptive to their activities.

If you should have any questions after reading this, I shall be glad to confer with you. In addition, Ms. Barbara Jones, secretary to Richard D. Jackson, Director of Administration for the State of Ohio will participate in coordinating reports from the various localities and she undoubtedly can add to your perspective.

I am delighted at the efforts the Chamber has made already to ascertain the true impact of the weather and the energy shortages on our local commerce and industry, and I feel you are uniquely qualified to assist the Department of Labor in providing proper information to the President.

Sincerely yours,

TOM MOODY, Mayor

TM: pm
Enc.
cc: Ms. Barbara Jones
The White House has directed the Department of Labor to provide a daily State by State Summary of Energy Related Activities to insure that the President has the most comprehensive and timely information available. The following information is needed from each State on a daily basis:

1. The best estimate of the total number of individuals unemployed as a consequence of weather conditions and related energy shortages. This total number should reflect new layoffs and/or recalls since the last report and include both insured and uninsured workers. Estimates also should include school personnel who may be temporarily impacted. It is important that the State estimates reflect the most comprehensive and reliable information available to the State Employment Security agencies and other State agencies with a direct involvement in the current problem.

Where feasible, the estimates should be coordinated with the special task forces established by and reporting to the Governors. The network of local SESA offices should be in a good position to contribute to the development of these estimates by their monitoring of the changing local situation and contacts with local industries.

SUBJECT: CURRENT WEATHER/ENERGY PROBLEMS

THE WHITE HOUSE HAS DIRECTED THE DEPARTMENT OF LABOR TO PROVIDE A DAILY STATE BY STATE SUMMARY OF ENERGY RELATED ACTIVITIES TO INSURE THAT THE PRESIDENT HAS THE MOST COMPREHENSIVE AND TIMELY INFORMATION AVAILABLE.

THE FOLLOWING INFORMATION IS NEEDED FROM EACH STATE ON A DAILY BASIS:

SF-1201 (R-69)
THE ABOVE INFORMATION SHOULD BE PROVIDED TO THE REGIONAL OFFICE EACH DAY AND SHOULD REFLECT THE RELATED ESTIMATES OF ACTIVITIES AS OF THE CLOSE OF BUSINESS FOR THE PREVIOUS DAY. AS DISCUSSED BY TELEPHONE THIS MORNING, EACH STATE ADMINISTRATOR IS ASKED TO SUBMIT ONE REPORT WHICH COVERS THE ACTIVITIES IN THAT STATE. GOVERNORS' DIRECTORS OF MANPOWER ARE ASKED TO PROVIDE WHATSOEVER INFORMATION IS AVAILABLE TO THE EMPLOYMENT SECURITY ADMINISTRATOR.

IT IS MOST IMPORTANT THAT THE FIGURES REPORTED BY THE STATE BE THE ONLY FIGURES USED BY ALL LEVELS OF GOVERNMENT IN IDENTIFYING THE NUMBER OF TOTAL UNEMPLOYED DUE TO WEATHER/ENERGY PROBLEMS. THE REPORTS WHICH ARE DUE MONDAY THROUGH FRIDAY AT 10:00 AM EACH MORNING SHOULD BE DIRECTED TO ME ATTENTION: CHUCK KANE. YOUR COOPERATION IN COMPILING AND SUBMITTING THIS REPORT WILL BE GREATLY APPRECIATED.

AND FIRMS.

2. A SUCCINCT DESCRIPTION OF ANY PROBLEM (S) RELATING TO SESA AND CETA RESPONSIBILITIES CONSIDERED URGENT TO BRING TO THE ATTENTION OF THE NATIONAL OFFICE AND WHITE HOUSE.

3. BRIEF SUMMARY OF ACTIONS TAKEN BY SESA'S AND CETA'S PRIME SPONSORS IN RESPONSE TO THE IDENTIFIED PROBLEMS. FOR EXAMPLE, UTILIZING ARMORIES AND OTHER PUBLIC FACILITIES FOR SPACE; WAIVING PRESENT PERSONNEL POLICIES TO HIRE TEMPORARY HELP IN UI OFFICES; UTILIZING NEW SHORT TERM PSE ENROLLEES FOR EMERGENCY SERVICES; EXTEND WORK HOURS OF SESA OFFICES, ETC.
APPRECIATED.
RICHARD C GILLILAND RA ETA USDOL REG V TWX 910221174
MEMORANDUM

TO: All Senators
FROM: Senator Ocasek, President Pro Tem
RE: S. B. 51 - School Closings
DATE: February 15, 1977

Last Thursday and Friday I accompanied Dr. Essex on visits throughout the state to meetings with Superintendents relative to S. B. 51 and any concerns related to school closings either through weather or lack of energy.

Attached is a summary of the seven regional meetings. You will note that it is not a serious problem of make-up days prior to the end of the school year, June 30th. Concern was expressed as to weather make-up days for Saturdays, and in June as to pupil attendance. There was also a division of opinion over whether further legislation should be enacted in the near future or at a later date.

If you have any opinions relative to this matter, please express them to Senator Jackson as he will probably be sponsoring further emergency legislation relative to weather-related days of closing. I would also be happy to discuss the schools' concerns as we heard them last week.

cc: attach.
"Operation Deepfreeze"

State Totals:

1. How many weather related days have you been closed this school year?
   - 247 0-5
   - 121 6-10
   - 82 11-15
   - 27 16-20
   - 0 over 20

2. How many energy related days have you been closed?
   - 237 0-5
   - 141 6-10
   - 41 11-15
   - 8 16-20
   - 0 over 20

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   - 274 yes
   - 108 no
   - 48 no answers

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   - 372 yes
   - 3 no
   - 49 no answers

Districts Represented = 430
Attendance = 655
SURVEY OF SCHOOL CLOSINGS

SUMMARY

Cincinnati

1. How many weather related days have you been closed this school year?
   - [19] 0-5
   - [16] 6-10
   - [5] 11-15
   - [15] 16-20
   - [0] over 20

2. How many energy related days have you been closed?
   - [42] 0-5
   - [9] 6-10
   - [4] 11-15
   - [0] 16-20
   - [0] over 20

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   - [41] yes
   - [7] no
   - [7] no answer

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   - [41] yes
   - [1] no
   - [13] no answer

Districts Represented = 55
Attendance = 69

Zanesville

1. How many weather related days have you been closed this school year?
   - [18] 0-5
   - [21] 6-10
   - [5] 11-15
   - [3] 16-20
   - [0] over 20

2. How many energy related days have you been closed?
   - [14] 0-5
   - [21] 6-10
   - [3] 11-15
   - [5] 16-20
   - [0] over 20

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   - [31] yes
   - [8] no
   - [9] no answer

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   - [44] yes
   - [1] no
   - [5] no answer

Districts Represented = 48
Attendance = 250
Youngstown

1. How many weather related days have you been closed this school year?
   
   0-5 13 6-10 1 11-15 0 16-20 0 over 20

2. How many energy related days have you been closed?
   
   0-5 24 6-10 2 11-15 0 16-20 0 over 20

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   
   39 yes 30 no 7 no answers

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   
   70 yes 1 no 5 no answers

Districts Represented = 76
Attendance = 109

Dayton

1. How many weather related days have you been closed this school year?
   
   0-5 25 6-10 5 11-15 1 16-20 0 over 20

2. How many energy related days have you been closed?
   
   0-5 28 6-10 9 11-15 0 16-20 0 over 20

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   
   54 yes 16 no 14 no answer

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   
   72 Yes 1 no 11 no answer

Districts Represented = 84
Attendance = 127
Cleveland

1. How many weather related days have you been closed this school year?
   - 44 (0-5)
   - 10 (6-10)
   - 1 (11-15)
   - 2 (16-20)
   - 0 (over 20)

2. How many energy related days have you been closed?
   - 39 (0-5)
   - 13 (6-10)
   - 3 (11-15)
   - 2 (16-20)
   - 0 (over 20)

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   - 41 (yes)
   - 14 (no)
   - 2 (no answer)

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   - 54 (yes)
   - 2 (no)
   - 1 (no answer)

Districts Represented = 57
Attendance = 99

Toledo

1. How many weather related days have you been closed this school year?
   - 40 (0-5)
   - 22 (6-10)
   - 10 (11-15)
   - 1 (16-20)
   - 2 (over 20)

2. How many energy related days have you been closed?
   - 36 (0-5)
   - 33 (6-10)
   - 4 (11-15)
   - 0 (16-20)
   - 0 (over 20)

3. Do you have plans to continue some form of instructional activity with students and teachers during energy related closings?
   - 40 (yes)
   - 26 (no)
   - 7 (no answers)

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   - 65 (yes)
   - 6 (no)
   - 2 (no answers)

Districts Represented = 73
Attendance = 103
Columbus

1. How many weather related days have you been closed this school year?
   - 16 0-5
   - 12 6-10
   - 4 11-15
   - 5 16-20
   - 0 over 20

2. How many energy related days have you been closed?
   - 10 0-5
   - 15 6-10
   - 7 11-15
   - 1 16-20
   - 0 over 20

3. Do you have plans to continue some form of instructional activity with students and teachers during energy-related closings?
   - 28 yes
   - 7 no
   - 2 no answers

4. With the modification of the 180 day requirement due to energy related closings as enacted in S.B. 51, will you be able to complete your school year by June 30?
   - 28 yes
   - 0 no
   - 9 no answers

Districts Represented = 37
Attendance = 77
Honoroble Oliver Ocasek
President Pro Tempore
Ohio Senate
State House
Columbus, Ohio 43215

Honoroble Vernal G. Riffe, Jr.
Speaker, House of Representatives
State House
Columbus, Ohio 43215

Dear Senator Ocasek and Speaker Riffe:

I am in receipt of your letter dated February 9, 1977, requesting my views on the accuracy of assertions made by M. E. White, Chairman of the Board, Columbia Gas of Ohio, Inc. in his letter of February 7, 1977 to each of you. In it Mr. White asserts that Revised Code Section 4905.302 appears to prevent his company from charging a residential customer for short-term emergency volumes of gas while directing that the costs of such purchases be assessed only against curtailed customers.

Based on his interpretation of the law, Mr. White proposes that the General Assembly suspend the operation of Section 4905.302 until November 1, 1977. He asserts that a suspension of the law would enable Ohio distribution companies to compete on an equal basis with other distribution companies for gas needed this winter to supply residential customers.
I have researched Section 4905.302 and have concluded that Mr. White's interpretation of the Section is not entirely accurate. No suspension of the law is necessary to charge residential consumers for short-term emergency volumes of gas used to meet their demands.

Notwithstanding Section 4905.302, Ohio distribution companies may recover the cost of short-term gas used to supply the needs of residential consumers provided that none of the gas decreases levels of curtailment for classes other than residential consumers. In other words, there appear to be no statutory restrictions to the purchase of emergency volumes of gas for use of residential consumers or for billing those residential consumers as long as none of the emergency volumes of gas for which they are charged decreases levels of curtailment to other customer classes.

As usual the Office of the Attorney General is available to answer any further questions you may have on this matter or to do any legal research necessitated by the current energy shortage.

Sincerely,

WILLIAM J. BROWN
Attorney General

vh

cc: Governor James A. Rhodes
COLUMBUS--Senate Majority Leader Oliver Beamen and House Speaker
Vern Riffe issued the following statement in response to correspondence received from Harvin E. White, Chairman of the Board of Columbia
Gas of Ohio, Inc.

****************

Columbia's recent allegation that HB 1213 prohibits them or any
other Ohio Gas Company from making emergency purchases of natural gas
is wrong.

Nothing in HB 1213 prohibits a natural gas company from purchas-
ing any gas at any time gas might be available.

Likewise, Columbia is incorrect in its allegation that it cannot
charge its customers who use emergency purchases of natural gas, the
full price of that gas.

HB 1213 was written and enacted on the strict principle that
whoever uses the gas pays for the gas.

One matter should be made very clear, however, So long as Columbia
has on hand regular priced gas which it purchased at the start of the
winter season, no higher priced emergency gas should be piped to
Columbia's residential customers. If the only gas left is emergency
gas, then the home owner will receive it and will pay for it.

It will not go unnoticed that Columbia sold nearly 21 billion
cubic feet of its regular priced natural gas reserves last fall --
that was a management decision.

It will also not go unnoticed that Columbia, just yesterday,
told many of its non-residential customers to start "burning" gas
again -- another management decision based on the belief that the
weather will be normal henceforth.

If Columbia is attempting to cover-up bad management decisions
by using enacted legislation and the weather as its scapegoat, we
will not tolerate that.

Columbia should get on with the business of serving its cus-
tomers. It should begin to think of the public it serves!

-- 30 --

Attached are copies of Columbia's/ Speaker Riffe's correspondence.
Also a February 9 letter from the Attorney General to Speaker Riffe and
Senator Ocasok.
Community Involvement In "School Without Schools"

"Community Schools" have been in operation in this country for many years beginning in 1935 in Flint, Michigan, through the pioneering efforts of Flint school personnel and such community leaders as Charles Stewart Mott.

Although schools in Columbus, Ohio, have not carried the label "Community Schools," many of the activities sponsored by the Columbus Schools have, no doubt, been characteristic of those sponsored under the aegis of community education in schools across the country. It seems reasonable to predict an even greater emphasis upon the "Community" aspects of education and increased liaison between school and community in Columbus in the future due to the work of several individuals and groups during the crisis precipitated by the closing of public and parochial schools for a 30-day period beginning February 7, 1977.

The "School Without Schools" program in Columbus required the mobilization of both school and community resources within a matter of a few days. In fact, the mobilization of school and community resources within severe time constraints was, in itself, an achievement worthy of investigation. However, such efforts resulted in a month-long demonstration of what has been called in the community education literature the educative community--where everyone teaches and everyone learns. Nearly every public and private agency delivered educational services and classes were held in such
facilities as pizza parlors, banks and private homes. Television and radio stations sponsored educational programs, many of them taught by local teachers. Parents assumed responsibility for assisting students to learn at home and teachers maintained daily contact with parents.

The lessons to be learned from the Columbus experience are many. Certainly, the logistics of planning for such a crisis are of concern to all schools and communities faced with future emergency closing of schools. However, for the student of community education, the inferences to be drawn go beyond how to keep school without schools. What happened during the month-long experiment in Columbus may well have altered perceptions of school personnel regarding the role of community agencies and groups in the educative process. Similarly, community groups and agencies may have developed renewed interest in becoming part of the educative process. If, indeed, such changes did occur as a result of the crisis, the relationship between school and community in Columbus may have been profoundly altered for the future. Hence, those who would infer from the Columbus experience the means to increased-school-community involvement in their communities would then require answers to the following questions:

1. What community agencies or groups were involved?
2. What led to the involvement of those particular agencies or groups?
3. How did the involved agencies or groups perceive their contribution during the crisis?
4. How were the involved agencies or groups perceived by school personnel?
5. What changes in perceptions among school and community personnel may have resulted from increased community involvement during the crisis?

In an effort to suggest possible results from increased community involvement, the contributions of three selected agencies and/or groups will be discussed—parents, the Ohio State University and agencies providing field trips.

Parent Involvement in "School Without Schools" Program

The writer interviewed several parents, teachers and principals regarding the part played by parents during the crisis. All groups interviewed believed that parents were much more actively involved in their children's education during the crisis and all groups predicted increased parent involvement once the schools were reopened.

The parents interviewed seemed genuinely pleased at the opportunity to be directly involved in the educational process, although many parents were not sure they would welcome such heavy involvement year-round. One parent remarked, "After a month of homework and pushing to get assignments done, I'm ready to let the teachers do the teaching again." However, that same parent testified that she was much better informed regarding the goals of the school and would keep in much closer touch with the teachers in the future.

Although several parents referred to the lessons provided through the media, all parents interviewed attributed the success of the school without schools primarily to close working relationships between school personnel and parents.

It would appear that the impetus for increased parent involvement
came from contacts initiated by teachers and principals. Teachers were urged by principals to initiate contacts with parents, and apparently most teachers did urge parents to assist in teaching the children at home. However, several principals reported incidents of parents volunteering their services during the crisis, and the writer observed a number of parents visiting the community sites where classes were in session. When asked if parents visited regular school sessions in such large numbers, the principals at two sites reported that they did not. Both teachers and principals reported increased home telephone contacts and visitations by teachers and student teachers. As one central office administrator put it, "The prime factor in the success of the experiment is the spirit which has prevailed throughout the month." Apparently, a spirit of cooperative endeavor to maintain an educational program in the face of crisis was demonstrated by both parents and school personnel in Columbus.

Whether the spirit of cooperative effort to provide education within the community will continue remains to be seen. However, it seems likely that if parents are to continue to be productively involved, teachers and principals will need to continue to initiate contacts and provide opportunities for parents to get involved. As Ms. Judy Carter, daughter-in-law of the President, remarked at a recent National Community Education workshop, "All it takes to get people involved is to ask them. You'd be surprised what people will do if you only ask." However, in the case of the schools, the asking must be done by school personnel because most parents still view
education as the province of the professional educator. And while many of the barriers previously existing between parent and school have been removed in Columbus as a result of the crisis, continued efforts to convince parents that they can contribute to the educational process will be required.

Involvement of Ohio State University in "School Without Schools" Program

While few school systems in crisis have ready access to an institution which provides the resources of Ohio State University, nearly every school system has access to some institution of higher learning; hence, the story of how Ohio State University became involved in the "School Without Schools" Program merits consideration by those school systems seeking greater use of existing community resources.

Information regarding the involvement of Ohio State University was secured from two sources—an interview with Ms. Ida Holapz, Assistant to the Dean of the College of Education, and Dr. Frederick Cyphert, Dean of the College of Education at Ohio State University, and a press release prepared by Cyphert.

The initiative to make the resources of the University available to area schools during the crisis appears to have been primarily that of Cyphert. After a series of brief meetings with the members of the college's faculty, Cyphert wrote area school superintendents on February 2, one day after the decision to close schools had been announced, to offer to them what limited space the University had
available and as many of its faculty and equipment resources as could be mustered in a short time without disrupting ongoing University programs.

On that same day, Cyphert sent the University's 18 deans a memo asking them to develop an inventory of tours, demonstrations, course offerings, special programs and lectures they could make available to area school children.

Two days later, on February 4, after processing the dean's responses, Cyphert sent a list of available educational experiences for children to area superintendents. The offerings totaled 165, enough to make up the curriculum of a small liberal arts college.

Offerings included short courses on environmental planning, population and the world's food supply, folk art, rare books, and film and dance workshops. Special audit arrangements for high school students in the University's basic courses were also worked out.

Cyphert's report of the initiatives of the University to serve the community indicates a real effort to avoid the usual logistical entanglements involved in programming at the university level. When asked how this was accomplished, Cyphert replied, "One reason is that people at the University were already sensitized to the nature of the problem the community faced. There was no debating the fact that an educational crisis existed, nor was there any question that we had a major responsibility to get involved."

A second factor, he said, was the free flow of communication from the start of the declared crisis between the College of Education and the office of the governor (James A. Rhodes), the state
legislature, the state department of education, area school superintendents, and local teachers' associations. "We had a sound, cognitive map of where all of them were going and why.

"Lastly, for the first time in years representatives of all parties to a major undertaking were brought together in the same place at the same time. People responsible for space allocation, for scheduling, and for academics all came together face to face. And that's the way communications took place, simultaneously, not serially, and face to face, not by memo.

Because of the urgency of the University's task, the dean admits, "I made decisions I had no right to make under normal circumstances. But if I'd waded through normal channels and waited for the usual process of communication and decision-making to run its course, we'd still be deliberating over a plan."

Cyphert also has been impressed with the effects of crisis on the University itself. "What we all have found is that there is no house of talent greater than here at this University. We have also found that there is even more talent than is being used effectively in the course of normal events, largely because we routinize, stereotype. Our professional ranks, filled with knowledgeable and imaginative people, can do much more than we routinely give them a chance to do. This crisis has given them that opportunity and they have responded generously."

In the case of the University as with parent involvement, the question of whether the momentum will be sustained remains to be seen. The University has demonstrated that it can extend itself to
include educational opportunities outside those usually provided to the university community exclusively, while at the same time convincing many of its faculty members that they have talents which can serve the community. Continued use of University resources by the community will require sustained contact between community representatives, particularly school personnel, and key members of the University staff.

Involvement of Agencies Providing Field Trips for the "School Without Schools" Program

On February 2, 1977, the Handbook for School Without Schools was issued by the Columbus Public Schools detailing, among other things, 38 different tours available to student groups within the Columbus area. An emergency communications post was set up in the Board of Education building to expedite transportation for the greatly expanded field trip activity and the shuttle bus service required to utilize off-campus class meeting sites. Subsequently, the field trip sites were increased until there were 203 available field trip sites.

Although the prime purpose of discussing field trips is to identify the range of possible resources and the means by which they are identified, it must be borne in mind that utilization of such resources requires an efficient transportation network supported by an accessible communication system. Columbus provided both. This writer spent time in the emergency communications area and discussed with personnel assigned there the problems encountered. Surprisingly
few problems were encountered, thanks to an effective communications system. Schools anticipating similar emergency closings would do well to study the emergency communications plan so skillfully employed by the Columbus schools.

During the month-long "school without schools" program, 97% of the closed schools scheduled field trips which involved approximately 96,000 students in one or more of such trips. The trips included such sites as:

Air Force Base
Airport
Art gallery
Banks
Black Hall of Respect
Center of Science & Industry
City Hall
City tours
Conservatory
Dairy barns—O.S.U.
Fire houses
French market
Heliport
Hospitals
Industrial plants
Newspaper offices
Ohio Historical Society
Ohio Theatre
Police Academy
Restaurants
State Capitol
Supermarkets
TV and radio stations
Zoo

School personnel report that most of the sites used for field trips were volunteered by the agencies themselves and, in many cases, those agencies employed additional personnel to manage the large numbers of students touring the facility. The writer visited two field trip sites and talked to personnel involved in providing
services. The staff at both the Center for Science and Industry and the Public Library viewed the increased activity very positively and reported good cooperation by school personnel. Members of the school staff who coordinated the field trip activity pointed out that during the crisis many additional field trip sites were identified which can be used when the schools are reopened.

It seems reasonable to assume that as a result of the "School Without Schools" program additional agencies have been included in the educational process and that through sustained effort on the part of the schools such agencies can continue to share in making Columbus an educative community.

Although personnel in the Columbus schools do not claim to have "community schools," per se, this writer's observations during the "School Without Schools" program would indicate that there exists in Columbus a climate conducive to the development of a community education program. The extent to which Columbus school personnel capitalize upon that climate as the schools reopen will, no doubt, determine the future of community education in that city.
C. Hearings

1. Group Interviews with a Selected Group of Columbus Public Schools Teachers

On February 22, members of the study team interviewed a group of about 25 teachers who had been selected to represent different grade levels and subject matter areas (science, social studies, and math) in the Columbus Public School system. The meeting was chaired by Daniel Stufflebeam with other members of the team participating in the questioning.

Eight general questions were presented to the teachers and they were asked to comment freely in response to these questions. Each question is repeated below followed by characterization of the responses that were received.

a. What was it like to be a teacher when "School Without Schools" first got started? Would you say the situation was exciting, confusing, challenging?

From the responses received, it is obvious that to be a teacher in the early days of "School Without Schools" was to be in a great state of confusion. Directives and other directives countermanding the prior directives flowed from many sources, including the superintendent's and principal's offices, the CEA, and of course the gas company. These communications were conveyed by television, radio, telephone, newspaper bulletins, and hallway conversations. Having access to the emergency central office communication nerve center helped, but it didn't solve the problem. As the teachers said, it obviously couldn't because everyone from the top down was confused and didn't know what they could or could not do. Confusion certainly ruled the teachers' day.
In addition, the teachers interviewed thought that many people suspected that the School Without Schools program was just a public relations program. Many people, they said, at first didn't take the idea seriously. At the same time, there apparently were many teachers who were enthusiastic, excited, ready to move ahead and do something good and different.

b. Please describe the charge you received. How did your role change, if at all?

Consistent with their answers to the first question, the teachers said their charge wasn't very clear. They didn't know whether they would have to work through spring vacation, whether they would have to make up days in the summer. They further weren't sure whether grading would be delayed until, after school with schools returned and subsequently found that grading was to proceed as usual. Originally they said they were told to cover the same material that they would have covered in the classrooms. But overall they said that even as the School Without Schools was coming to a close, they still had no set of directives, didn't know what other people were doing, didn't know how the overall program was proceeding, and didn't even know what to tell their students about the grading that would be done. As a consequence they said the program had become a very individualized program and reflects individual teacher's thoughts about what they are required to do as well as what they thought they should do given that the requirements were not clear to them. A positive side of this response was that
one teacher said that other teachers felt they were being encouraged to be creative and saw this as a positive aspect of the lack of direction.

c. Overall do you think student needs have been met by School Without Schools as well as they would have been met under the regular program?

The responses to this question were pretty thin. In general the teachers thought that school with schools is definitely a preferable way of meeting student needs. However there were some positive reactions that suggested that many of the students' needs were met, and in some cases, met even better than they could have been met under normal circumstances. For example, one person noted that attention in senior high had been better and that problems of retention between sessions were markedly absent compared to what had been expected. Another person noted that there likely was a problem in access to textbooks and other books in the schools. On another positive note the advisor system was noted as a way of helping individual students keep in contact with someone who could help them with their individual interests and needs. It was further noted that students were given a real opportunity to participate in self-directed learning and some people hoped and thought there would be a positive carry-over in this area. The final comment was that some people think that administrators have been able to respond more directly to student's needs through this period by virtue of being called on to truly administer as opposed to serve as a detective in apprehending wrongdoers.
d. In what respects would you judge School Without Schools a success?

There were a great number of responses to this question, and, in general, it was apparent that the teachers believed that the program had indeed been a success given the requirement to do something instead of School with Schools. The majority of responses were positive but there were also some negative responses. Positive responses included the following:

- Students are doing more on their own. Putting the responsibility for their own learning on the students was definitely a positive aspect.

- Mothers are learning more. The telephone contact with the parents was important and helped parents to get insight into their roles in education.

- The planning was tremendous. Somebody said, "Actually we demonstrated what we were able to do. We showed that we are indeed professionals."

- Discipline has improved because of the program. This experience will give us impetus for planning our programs for next year. It was a positive experience to be able to watch other people teach (on television).

But there were some negative responses as well.

- One thing didn't work, the teacher centers. Students would call, especially at the junior high school level, make an appointment but would not show up. Senior high students may have become babysitters throughout this period.
One person summed up the responses to the success question pretty well. He said, "For us it was kind of like a breakthrough. There were computers, swimming, the newspaper, television, entanglement in government, and with the gas company. It was sort of like a war. I'm glad that most people dug in and did their job. We didn't do anything dynamic. We worked hard. It was school. We did our job."

**e. If it were to be done over, what changes would you like to see?**

Most people were in agreement that it shouldn't be done over unless absolutely necessary. But they said some positive features that ought to be retained included getting away from dependence on a set textbook, continuing the whole business of telephone contacts, reallocating time so the teachers would have special time to spend in planning and working with those students who are behind, dropping or changing the tutor centers so that they work, and making the requirements for students in the program clear and explicit.

Speculating about what particularly should be done if the program has to be repeated in another year, the teachers hoped that more consistency could be built into communications and directives, that the tutor centers could be improved or dropped, requirements of students could be made explicit, that bothersome problems such as parking and a lack of space for meeting with students and a lack of telephones could be resolved, and that better arrangements could be made for students who need laboratories such as chemistry labs. It
was also suggested that kits for individual students could be prepared and provisions could be made so that teachers and students could make better use of television, and someone said that it would be good if the Dispatch could continue to carry educational materials. Overall, however, one teacher summed it up by saying he was glad the program is over with, he hoped we wouldn't do it again, said especially one of the difficulties in going to another school for the School With Schools part of the program is that you don't want to use other people's equipment and even if you do, you don't know where things are. Finally he said you can't carry your lab with you.

f. How about attendance, should it have been mandatory for out of school activities?

One person said that she had gotten good attendance. Other people complained of the lack of explicit requirements for attending scheduled activities. Someone spoke about one teacher who set up office hours and coerced students to attend in supposed violation of the rules of the program. But it was noted the students were coming and the service was being used. It was generally agreed that students would use services if requirements were explicit.

g. How would you rate the importance of TV, radio, the newspaper, the tours, and community courses, out-of-school sessions and the in-school sessions?

Positive responses to this question seemed to be in relation to the field trips. It was noted that they are heavily utilized and have proven to be a very desirable, and important part of the School Without Schools program.
Expressions of gratitude were made concerning the TV, radio, and newspaper portions of the program, but it was further noted that these often didn't fit with the teacher's plans or the student's current level of progress, and that it was difficult to know what would be coming forth so that teachers could utilize the TV, radio, and newspaper offerings in their planning of instructional experiences. It was noted that even the field trips would have been better if transportation problems could have been solved (for example, some families had several children who had to be gotten to points of departure at the same time for different field trips). It was also noted that the newspaper materials seemed to be aimed at second through fifth grade and had little to offer above or below those levels.

**h. How adequately have parents contributed?**

Teachers said they found that they could get more support from parents than they previously had thought they could and there was an indication that the parents are always absolutely crucial in this type of a program. It was repeatedly mentioned that parents also were benefited by virtue of the School Without Schools program.

Overall, then, this small group of teachers were proud of the efforts they and their colleagues had made in responding to the energy crisis, 1977. They said the program had definitely started out on a very confusing note, and that many of them had remained confused throughout the experience. They seemed to understand that most of this confusion was unavoidable, they were highly respectful of the
ship that had been shown by the Columbus administration, and were grateful for the contributions of community agencies and parents. Overall, they hoped the School Without Schools program would never have to be repeated, but if it did, that direction could be clearer, planning could be more advanced, and requirements on students imposed and made more explicit. The teachers also hoped that an emphasis on using the community as a learning laboratory, more individualized instruction and less keeping to the textbook might be positive long-term benefits from lessons learned during the School Without Schools program.
2. **Group Interview with TV and Media Teachers in the Columbus School Without Schools Program**

Members of the study team met with about 20 teachers who had been commissioned to do TV and radio teaching during the School Without Schools Program. The discussion was free-flowing and a number of main points seemed clear from the discussion.

The first is that the people involved in the TV and radio part of the School Without Schools Program were undoubtedly excited and heavily involved by their participation. They had had a brand new learning experience themselves. Some of them had been conscripted into the program, others had volunteered, and still others who wanted to be a part of it had been left out. At first many, and perhaps all of them, were frightened and confused about the prospect of appearing before the public. They had much to learn about preparing scripts, props, rehearsing, using cues, communicating clearly, and, in general, appearing on taped and live media. At the same time, they had the students they had previously been working with who were left behind and had to worry about what was happening to them.

It seems that these teachers were so occupied with learning and performing their new role that they could hardly think about the deeper issues of how to stimulate learning and how to make what they did mesh with the larger School Without Schools Program.

It seemed that the media teachers viewed their role considerably differently than did the other teachers. The former group seemed to see the media teaching as the core part of the School Without Schools Program, while the regular teachers thought of it as a little used public relations feature of the program. Probably all teachers would
agree that the media presentations were little utilized by students and teachers.

This is not to say that the media part of the program was a failure. It wasn't.

It:

- Put education and teaching in the public view of the community and the parents.
- Identified talented teachers and gave them an important learning experience in regard to the media.
- Created positive working relationships between the school district and the public media.
- Provided learning experiences for community members and parents.
- Helped Columbus School District get a realistic view of some of the possibilities of using media as well as the great problems and difficulties that must be overcome if the TV and radio presentations are to make significant impacts on the learning of students.
- Resulted in preparing instructional props and video tapes that can be utilized repeatedly by regular teachers in regular classrooms.

Overall the TV and media teachers were very enthusiastic and positive about their participation in the program. They had been helped to grow through this experience in their professional capacities to teach and use media, but they agreed that there was insufficient opportunity to solve problems of how to relate media instruction to the on-going learning activities of the students throughout the Columbus system.
3. **Group Interviews with Columbus Parent-Teacher Association (PTA) Representatives**

Information about School Without Schools was obtained from the central board of the Columbus Public Schools PTA by means of a mailed questionnaire and a structured group interview. Twenty-six written responses were obtained which included both teacher and parent responses. Additionally, twelve parents on the central PTA board participated in the group interview which was held May 3, 1977.

Both the written and interview responses reflected that the group had mixed feelings about the program. Most of the respondents wished the program hadn't been necessary and hoped it would never have to be repeated. They were proud and appreciative of the community effort but were dubious about its educational benefits. They complained that many students just wandered the streets and that it was very difficult for families with more than one child to transport the children to the various scheduled functions. They were agreed that a main weakness of School Without Schools was in not requiring all activities and in not testing and grading the material covered. The majority of them favored instituting some sort of annual winter vacation in the event of future crises.

Following is a summary of the written and oral responses to each of the eleven questions that were asked.

a. **How did School Without Schools affect the community?**

When boiled down, the responses to the question were:

- School Without Schools united the community in an educational venture; particularly it brought education and the media together.
It caused the community to develop a greater appreciation of the need for education and the value of the local school districts; and it dramatized how a large urban school district can become involved with its community.

It greatly increased parents' involvement in their children's education.

It saved the community from having to pay teachers extra for making up school days in the summer.

It reduced educational services to students.

It sensitized the community to the severity of the energy problem.

b. What are the main benefits of School Without Schools?

Three people said emphatically that there were no benefits; they elaborated by saying the School Without Schools was an emergency measure and was only slightly better than having NO.SCHOOL. The other respondents cited benefits for students, parents, teachers, the school system as a whole, and the community as follows:

Students were given opportunities to continue their education; slow learners, especially, were given individual attention; opportunities for student parent conferences were increased; many students saw "how the other half lived"; students became more aware of the importance of teachers; good students had the opportunity to do challenging assignments; and the students were helped to retain what they had learned prior to School Without Schools.
Parents increased their awareness of the educational process and the problems of schooling.

Teachers were allowed to work in new mediums, and were forced to become more creative in using resources often overlooked.

The school district improved its relations with the public; School Without Schools resulted in much good will toward and better understanding of the schools, and the district improved its communication with all segments of the community.

The community found that many of its people could work together in an emergency and that they could do so in flexible and adaptable ways.

c. What are the undesirable consequences of School Without Schools?

Responses to this question reflected the general feeling of the PTA group that School Without Schools was making the best of a bad situation. In spite of the good will, good intentions, and hard work on School Without Schools throughout the community, the bottom line assessment was that education suffered. It was said that School Without Schools was almost the same as no school.

Teachers had to neglect the "whole child" while trying to keep up with the basics. But time was lost even in teaching the fundamentals, especially science and math. One effect of the program not being mandatory was unequal instruction -- some teachers worked hard, others didn't.
Parents were fooled into thinking something useful could be accomplished; they often couldn’t cope with their children’s assignments; and it was difficult for them to help even logistically where there was more than one age group in the family; they found that their children had been assigned too much homework and that this conflicted with field trips, contact with teachers, and other activities.

Students viewed School Without Schools as play time, and most ignored their assignments; those needing extra help didn’t take advantage of what was offered; many students lacked the motivation and parental support to carry through with their assignments; students were bored; there was a general loss of continuity in performance and attitude; and returning to regular sessions after School Without Schools was difficult.

Average and below average students suffered because they didn’t have sufficient motivation to work on their own.

Senior high students suffered especially because busy work replaced teaching.

d. Which, if any, of the components of School Without Schools should be integrated into the regular curriculum?

Many respondents noted that most elements of School Without Schools were already a part of the regular curriculum. Then they discussed their perceptions of the parts of School Without Schools?
The clear winner "with 13 votes" was field trips. The board members said they were terrific, well-organized, and very interesting. One person worried, however, that they might be too disruptive during the regular school year.

Four persons recommended the continued use of television if financially feasible. It was also recommended that it would work only if required and graded.

Other comments that were mentioned once or twice were newspaper instruction, better use of the business community in teaching, radio (as a supplement), and dittos.

Two people said that nothing whatsoever from School Without Schools should be continued in the regular program.

Should the Columbus Public Schools seriously consider modifying the school calendar in order to conserve energy? Would you favor some form of winter vacation?

Of the nineteen people who responded, only three were definitely opposed. Nine said maybe; they either weren't sure or were in favor of such a move only if a real crisis emerged. Seven said they would favor such a shift in the school calendar.

Those who were opposed were emphatic in their opposition but gave little explanation. They mainly said there must be some better way.

Those who gave a qualified or an unqualified yes contributed a number of observations. They noted that such a move should be executed only if there is a real
crisis; but the observation was also made that when industry is closed, it is a school's responsibility to be flexible. In the event of a crisis they said the Columbus Public Schools should have a contingency plan ready for execution.

Various ideas were expressed concerning what should be included in the contingency plan. Some said the plan should include a winter vacation along with the usual summer vacation. One person observed that the plan should eliminate summer supplemental income.

Suggestions for actual calendar changes included the following: Add 2-4 weeks to the Christmas vacation; if necessary, have vacation from December 1-January 6; start school one week earlier.

Several caveats were presented. One that was shared by several people was to bear in mind that it is as hard to concentrate in a steambath classroom as in a cold one. Another problem concerned what to do about the winter sport seasons.

f. What age groups profited most? How?

Six persons said they didn't know and five said none, because all students lost. Eight said the elementary students clearly profited most, two said it was the high school students; and preschool students and adults each received one vote. One person said they all profited in some ways such as learning to work independently and to assume responsibilities.
g. Which age groups profited least?

Four persons said they weren't sure, and four said all lost. Eight persons said the high school students got the least from the program, while the primary grades and junior high levels received two and one vote, respectively.

h. What types of learners profited least?

Three weren't sure, and four said none profited. Fifteen thought it was the better students; one comment in support of this feeling was that the accelerated students found School Without Schools a challenge. It was also stated that "a bright, motivated student will learn in any setting," but that there are not many of these students. Four respondents said the average students profited most. A comment in support of this was that the average students had help from their parents.

i. What types of students profited least?

The groups and the number of times each was identified are as follows:

- Slow students: 12
- Average students: 3
- Handicapped students: 2
- Minority group students: 2
- Previously unsuccessful: 2
- Middle Class students: 1
- All students: 2
- Don't know:

j. Given no energy problem, would you prefer some form of School Without Schools?

The sentiment was overwhelmingly against this idea.

- Nineteen people favored school as usual. One person said School Without Schools was a public relations tool.
and ought to be forgotten as quickly as possible. Another added that even spring vacation should be discontinued. Another person said that only another real crisis should close the schools. It was also stated that January and February are the best months for teaching; and another respondent suggested that more field trips should be added to school as usual.

Three persons said they would favor some form of School Without Schools and one person wasn't sure. One wanted it set up so the Spring Break would be retained. Another suggested that the month of February be devoted to School Without Schools.

If schools have to close again, what should be the contingency plan?

Many ideas were expressed in response to this question. They are listed below as they were presented.

- Charge students higher fees for shop, art, etc.
- Sell books to students
- Eliminate busing
- Charge $2.00 per class
- Begin a few days early (a week)
- Attend school on 6 Saturdays
- Skip final exams and teach up to last day of school
- Have longer winter break
- Cut out Easter vacation
- Have one month break -- late December to late January
- Stagger schedules so two schools could meet in one
o Have 4 nine-week sessions, with two week breaks and normal holidays, and of course, the longer summer break
o Find a better way for teachers and students to meet
o Use shutdown time as vacation
o Extend school into June
o Increase community involvement
o The program should be required
o All work must be graded and tested (high school)
o Assignments should be handed in and checked weekly
o All teachers and principals should work equal time
o Do not have classes in beer parlors or like places
o Teachers should be available daily in the community to help students
o Provide alternative meeting places for regular classes
o Make up all the drops missed
o Use of television, radio (commercial, public), and alternate classroom locations
o Have trips
o Coordinate curriculum with what has gone before
o Investigate and determine why we closed our schools and froze this winter while Columbia Gas and Texaco Oil were hoarding the Natural Gas Reserves
D. Secondary Analysis of Existing Data

1. Television Ratings

Regular Nielsen and Arbitron reports on television viewing in Columbus during the month of February, 1977 were obtained from the local television stations and analyzed for viewing patterns that could be linked to the School Without Schools Program. The three network television stations in Columbus donated morning air time to the program as follows:

- WBNS-TV (CBS), 2/7-2/25/77, 7:30 am-11:30 am (M-F)
- WCMH-TV (NBC), 2/14-2/25/77, 11:00 am-12:00 noon (M-F)
- WTVN-TV (ABC), 2/14-2/25/77, 9:00 am-11:30 am (M-F)

Arbitron reported Monday through Friday share trends (% of households watching television) during the past year in the Area of Dominant Influence (ADI) or greater Columbus area. These share trends are presented below as a four week average. Generally, the shares for the ADI did not differ greatly from the Metro Columbus shares. Asterisks (*) in the table indicate times each station participated in School Without Schools instruction.

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**Arbitron Television Research**

ADI rating trends for the percentages of households with a television set that were tuned to each channel were reported by Arbitron over a 2-1/2 year period and revealed results similar to the Neilson data as indicated in the table below. Asterisks (*) refer to times donated to School Without Schools. HUT refers to Household Using Television.

To interpret the table, consider the intersection of the February 1977 column and the 9:00 AM row. The data for that cell indicates that during that time slot and period that 29 percent of the households...
with a television set in the greater Columbus area had their sets turned on, that 12 percent were tuned to WCMH, that 2 and 3 percent, respectively, were tuned to WBNS and WTBN (the two channels that at that time were transmitting School Without Schools programs) and that 3 percent were tuned to some other channel. It can be noted by scanning the February 1977 column that the School Without Schools programs consistently drew smaller percentages of the viewing audience. WBNS, the channel with the most School Without Schools Programming, lost the most in its viewing audience as can be seen by contrasting the February 1977 column with those previous months and years.
## ADI Rating Trends

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</table>
Nielson estimated numbers of school age children watching television on the average over the four weeks in February 1977. Nielson also reported Monday through Friday share trends for the percentages of households watching television during the past year in the Designated Market Area (DMA) or greater Columbus area. The share trends are four week averages.

### ESTIMATES OF SCHOOL AGE CHILDREN WATCHING TELEVISION, FEBRUARY 1977 AND DMA SHARE TRENDS, FEBRUARY 1976-FEBRUARY 1977

<table>
<thead>
<tr>
<th>Time</th>
<th>WBNS-TV (Chd)</th>
<th>WBNS-TV (Ths)</th>
<th>WCMI-TV (Chd)</th>
<th>WCMI-TV (Ths)</th>
<th>WTVI-TV (Chd)</th>
<th>WTVI-TV (Ths)</th>
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<td>12,000</td>
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</table>

To interpret this table, consider the 7:00 am to 9:00 am row for February 1977. It shows that of the households tuned in at that time, 12 percent were tuned to WBNS-TV, and 8 percent to WCMH-TV.
and 8 percent to some other channel. Nielson estimated that 19,000 children aged 2-11 and 3,000 children aged 12-17 were watching WBNS-TV on the average during that time slot in February 1977. These estimates, however, are very unstable due to the small size of the respective samples and can only be used as a gross indication of viewing pattern. Compared to evening viewing (7:30 pm - 11:00 pm), the viewing behavior of school aged children during School Without Schools programming was relatively weak. It is apparent from the share trends that the channel with the least amount of School Without Schools programming (WCMH-TV) drew the largest part of the overall audience - an unusually large part, to be sure.

Nielson reported the following viewing patterns (4 week average) for school age children watching television Monday through Friday during February in the greater Columbus area. (See chart, next page.)

The conclusions drawn from these analyses and other more detailed data summaries were that the School Without Schools Program did have an effect on television ratings and shares for the three network stations in Columbus. Essentially, WBNS-TV, which donated the most time and resources of the three stations, was hurt on ratings and shares. This outcome does not reflect the impact it had on the small audience it had for each time period throughout the morning and it may be a result of the television instruction plan which had 15 minute programs, each aimed at a very specific age group (e.g., 1st grade reading, high school biology). Arbitron reported that out of 367,000 households estimated for the Columbus metropolitan area, an estimated 362,100 had at least one television set. Thus, the opportunity for television instruction was available for most children. Supplemental analyses obtained from
Arbitron were directed at answering the question of whether School Without Schools television was used by specific age groups when it was directed specifically at them. The analysis gave 15 minute breakdowns, Monday through Friday, 7:30-11:30 am, for 5 age groups. The pattern of watching did not follow the pattern of School Without Schools programming, in general. Survey data did indicate, however, that primary grade children did make use of School Without Schools television to a far greater extent than did upper grade level students.

<table>
<thead>
<tr>
<th>Time (am)</th>
<th>Total Households with Children 2-17 Watching Television</th>
<th>Households With Children Watching WBNS-TV Where Heavy School Without Schools Programming Occurred</th>
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<tr>
<td>10:30</td>
<td>55,000</td>
<td>8,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:00</td>
<td>48,000</td>
<td>6,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11:30</td>
<td>114,000</td>
<td>4,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Secondary Analysis of Existing Data

2. Rodosky Study

A dissertation study of reactions to and attitudes toward the School Without Schools Program by students and parents in the Columbus School District was conducted by Mr. Robert Rodosky, a doctoral student in Educational Development at The Ohio State University. Arrangements to obtain and make use of his data were made early in the present study by the principal investigators. The Rodosky data were used to answer research questions pertaining to the School Without Schools Program and to validate responses received in the mail survey described in this report (at least one common question was asked on each form of the two surveys).

Rodosky used a one percent random sample of available classrooms in each Aid for Dependent Children quintile in grades 2-12 in the Columbus Public Schools for his student survey (about 900 students). He received a 100% response rate by taking the questionnaire into the classroom. Approximately 300 parents of the 900 selected students (parents of every third student) were sampled for the parent survey. Rodosky's response rate for parents was about 32%.

Five instruments were used in the study: three to measure attitudes and actions at various grade levels (grades 2-3, 4-8, 9-12), one to measure attitudes and actions of parents, and one interview schedule for follow-up interviews with a subsample of parents and students. Reliabilities (Cronbach's α) reported for the four attitude inventories were:
primary (grades 2-3) = .55
intermediate (grades 4-8) = .81
secondary (grades 9-12) = .89
parent = .92

Results of an analysis of the Rodosky data generally verified information obtained by other means during the study. Students and parents were generally favorably disposed toward the program, but not ecstatic. Homework constituted the most frequently used instructional activity of students, and parents and student feelings toward different people connected with school either did not change or became slightly better during School Without Schools. Math was the most frequently studied subject during School Without Schools, according to parents. Parents did not take the active role in structuring student learning that was expected of them.

Considering the potential negative impact of sudden large-scale change in schools on a community, the program did quite well, at least in the eyes of students and their parents.
<table>
<thead>
<tr>
<th>ITEM</th>
<th>X</th>
<th>Sx</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. School without schools was good.</td>
<td>2.199</td>
<td>0.857</td>
</tr>
<tr>
<td>2. I was happy.</td>
<td>2.362</td>
<td>0.805</td>
</tr>
<tr>
<td>3. I went on a field trip.</td>
<td>1.950</td>
<td>0.967</td>
</tr>
<tr>
<td>4. I watched T.V. school.</td>
<td>2.579</td>
<td>0.774</td>
</tr>
<tr>
<td>5. I listened to radio school.</td>
<td>1.780</td>
<td>0.919</td>
</tr>
<tr>
<td>6. I did the newspaper work.</td>
<td>2.114</td>
<td>0.951</td>
</tr>
<tr>
<td>7. My teacher gave me homework.</td>
<td>2.956</td>
<td>0.283</td>
</tr>
<tr>
<td>8. My Mom and Dad made me do my school work.</td>
<td>2.759</td>
<td>0.602</td>
</tr>
<tr>
<td>9. My teacher helped me do school work.</td>
<td>2.292</td>
<td>0.899</td>
</tr>
<tr>
<td>10. My Mom and Dad helped me do school work.</td>
<td>2.742</td>
<td>0.629</td>
</tr>
<tr>
<td>11. I read a school book.</td>
<td>2.792</td>
<td>0.575</td>
</tr>
<tr>
<td>12. I did math.</td>
<td>2.962</td>
<td>0.248</td>
</tr>
<tr>
<td>13. I am happy to be back in real school.</td>
<td>2.708</td>
<td>0.658</td>
</tr>
</tbody>
</table>

Yes = 3  
Don't know = 2  
No = 1
**SURVEY:** Middle Grades Student Survey

<table>
<thead>
<tr>
<th>ITEM</th>
<th>( \bar{x} )</th>
<th>( s_x )</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. I feel that SWS was:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Good - Bad</td>
<td>2.371</td>
<td>0.835</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Useful - Useless</td>
<td>2.429</td>
<td>0.810</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Hard - Easy</td>
<td>2.367</td>
<td>0.863</td>
</tr>
<tr>
<td>(1) - (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Pleasant - Unpleasant</td>
<td>2.238</td>
<td>0.876</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Fair - Unfair</td>
<td>2.437</td>
<td>0.809</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Important - Not Important</td>
<td>2.589</td>
<td>0.699</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. During SWS I felt:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Happy - Sad</td>
<td>2.332</td>
<td>0.748</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Bored - Interested</td>
<td>1.984</td>
<td>0.924</td>
</tr>
<tr>
<td>(1) - (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Turned-on - Turned-off</td>
<td>2.068</td>
<td>0.849</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Useless - Useful</td>
<td>2.262</td>
<td>0.844</td>
</tr>
<tr>
<td>(1) - (3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Important - Not Important</td>
<td>2.365</td>
<td>0.767</td>
</tr>
<tr>
<td>(3) - (1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ITEM</td>
<td>$\bar{X}$</td>
<td>$S_X$</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------</td>
<td>-------</td>
</tr>
<tr>
<td>*6. During SWS how many times a week did you do the following:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. watched the T.V. lessons</td>
<td>1.9</td>
<td>1.5</td>
</tr>
<tr>
<td>b. listened to the radio lessons</td>
<td>0.5</td>
<td>1.1</td>
</tr>
<tr>
<td>c. did the newspaper lessons</td>
<td>1.4</td>
<td>1.6</td>
</tr>
<tr>
<td>d. went to the library</td>
<td>0.7</td>
<td>1.1</td>
</tr>
<tr>
<td>e. met with my teacher(or teachers)</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>f. did homework</td>
<td>3.3</td>
<td>1.2</td>
</tr>
<tr>
<td>g. read a school book</td>
<td>2.2</td>
<td>1.5</td>
</tr>
<tr>
<td>h. did math</td>
<td>3.0</td>
<td>1.3</td>
</tr>
<tr>
<td>i. worked on a subject other than reading or math</td>
<td>2.5</td>
<td>1.4</td>
</tr>
<tr>
<td>j. went on field trips</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>k. met in a place other than school</td>
<td>0.9</td>
<td>1.4</td>
</tr>
</tbody>
</table>

**7. During SWS:**

<table>
<thead>
<tr>
<th></th>
<th>$\bar{X}$</th>
<th>$S_X$</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. My teacher gave me new work to do.</td>
<td>1.8</td>
<td>0.4</td>
</tr>
<tr>
<td>b. My parents insisted that I listen to the T.V.- and radio shows.</td>
<td>1.4</td>
<td>0.5</td>
</tr>
<tr>
<td>c. My parents made me do the newspaper lessons.</td>
<td>1.2</td>
<td>0.4</td>
</tr>
<tr>
<td>d. My study schedule at home was different that it normally is during regular school.</td>
<td>1.8</td>
<td>0.4</td>
</tr>
<tr>
<td>e. I watched T.V. lessons intended for other grade levels.</td>
<td>1.5</td>
<td>0.5</td>
</tr>
</tbody>
</table>

* 0 - Not at all  
1 - Once/week  
2 - Twice/week  
3 - Three/week  
4 - More than three/week  
** Yes = 2; No = 1
<table>
<thead>
<tr>
<th>ITEM</th>
<th>( \bar{X} )</th>
<th>( s_x )</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. f. I listened to radio lessons intended for other grade levels.</td>
<td>1.2</td>
<td>0.4</td>
</tr>
<tr>
<td>7. g. My parents made me study my school work before doing anything else.</td>
<td>1.6</td>
<td>0.5</td>
</tr>
<tr>
<td>8. Are you glad to be back in school?</td>
<td>1.8</td>
<td>0.4</td>
</tr>
<tr>
<td>9. I now feel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>2.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Parents</td>
<td>2.4</td>
<td>0.6</td>
</tr>
<tr>
<td>Teacher(s)</td>
<td>2.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Classmates</td>
<td>2.3</td>
<td>0.6</td>
</tr>
<tr>
<td>School Work</td>
<td>2.1</td>
<td>0.8</td>
</tr>
<tr>
<td>Principals</td>
<td>2.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Bus Drivers</td>
<td>2.1</td>
<td>0.5</td>
</tr>
<tr>
<td>T.V.</td>
<td>2.3</td>
<td>0.7</td>
</tr>
<tr>
<td>Radio</td>
<td>2.2</td>
<td>0.7</td>
</tr>
<tr>
<td>Newspaper</td>
<td>2.1</td>
<td>0.7</td>
</tr>
<tr>
<td>Books</td>
<td>2.3</td>
<td>0.7</td>
</tr>
<tr>
<td>The Gas Company</td>
<td>1.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Library</td>
<td>2.3</td>
<td>0.7</td>
</tr>
<tr>
<td>State Government</td>
<td>2.0</td>
<td>0.8</td>
</tr>
<tr>
<td>City Government</td>
<td>2.1</td>
<td>0.8</td>
</tr>
</tbody>
</table>

** Yes = 2; No = 1
*** Worse = 1; No Change = 2; Better = 3
### RODOSKY TABLE 3

**SURVEY:** Upper Grades Student Survey

<table>
<thead>
<tr>
<th>ITEM</th>
<th>( \bar{x} )</th>
<th>( s_x )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel that SWS was:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. good - bad</td>
<td>3.7</td>
<td>0.9</td>
</tr>
<tr>
<td>b. meaningful - meaningless</td>
<td>3.6</td>
<td>0.9</td>
</tr>
<tr>
<td>c. unsuccessful - successful</td>
<td>3.5</td>
<td>1.0</td>
</tr>
<tr>
<td>d. complete - incomplete</td>
<td>3.3</td>
<td>0.9</td>
</tr>
<tr>
<td>e. explained - unexplained</td>
<td>3.5</td>
<td>1.0</td>
</tr>
<tr>
<td>f. exceptional - unexceptional</td>
<td>3.6</td>
<td>0.9</td>
</tr>
<tr>
<td>g. useful - useless</td>
<td>3.6</td>
<td>1.1</td>
</tr>
<tr>
<td>h. unorganized - organized</td>
<td>3.5</td>
<td>1.1</td>
</tr>
<tr>
<td>2. During SWS I felt:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. rewarded - unrewarded</td>
<td>2.9</td>
<td>1.0</td>
</tr>
<tr>
<td>b. turned-off - turned-on</td>
<td>2.8</td>
<td>1.0</td>
</tr>
<tr>
<td>c. happy - sad</td>
<td>3.5</td>
<td>0.9</td>
</tr>
<tr>
<td>d. involved - uninvolved</td>
<td>3.1</td>
<td>1.1</td>
</tr>
<tr>
<td>e. important - unimportant</td>
<td>3.1</td>
<td>0.9</td>
</tr>
<tr>
<td>f. bored - interested</td>
<td>2.7</td>
<td>1.2</td>
</tr>
<tr>
<td>g. attentive - unattentive</td>
<td>3.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>
RODOSKY TABLE 3 (continued)

SURVEY: Upper Grades Student Survey

<table>
<thead>
<tr>
<th>ITEM</th>
<th>$\bar{X}$</th>
<th>$S_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. During SWS I felt: (continued)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. indifferent - eager</td>
<td>2.8</td>
<td>1.0</td>
</tr>
<tr>
<td>i. concerned - unconcerned</td>
<td>3.3</td>
<td>1.0</td>
</tr>
<tr>
<td>3. During SWS how many times a week did you do the following things?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. watched the T.V. lessons</td>
<td>1.1</td>
<td>1.4</td>
</tr>
<tr>
<td>b. listened to the radio lessons</td>
<td>0.4</td>
<td>0.9</td>
</tr>
<tr>
<td>c. did the newspaper lessons</td>
<td>0.5</td>
<td>1.1</td>
</tr>
<tr>
<td>d. went to the library</td>
<td>1.1</td>
<td>1.2</td>
</tr>
<tr>
<td>e. met with my teacher( or teachers)</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>f. did homework</td>
<td>2.8</td>
<td>1.2</td>
</tr>
<tr>
<td>g. read a school book</td>
<td>1.9</td>
<td>1.4</td>
</tr>
<tr>
<td>h. did math</td>
<td>1.5</td>
<td>1.5</td>
</tr>
<tr>
<td>i. worked on a subject other than reading or math</td>
<td>2.3</td>
<td>1.4</td>
</tr>
<tr>
<td>j. went on field trips</td>
<td>0.4</td>
<td>0.8</td>
</tr>
<tr>
<td>k. met in a setting other than school</td>
<td>0.8</td>
<td>1.1</td>
</tr>
</tbody>
</table>

**4. During SWS:**
| a. My teacher gave me new work to do. | 1.9 | 0.3 |
| b. My parents insisted that I listen to the T.V. and radio shows. | 1.1 | 0.4 |
| c. My parents insisted that I do the newspaper lessons. | 1.1 | 0.5 |
| d. My study schedule at home was different than it normally is during regular school. | 1.8 | 0.4 |

* 0 = not at all 3 = three/week ** Yes = 2; No = 1
1 = once/week 4 = more than three/week
2 = twice/week
**RODOSKY TABLE 3 (continued)**

**SURVEY:** Upper Grades Student Survey

<table>
<thead>
<tr>
<th>ITEM</th>
<th>$\bar{X}$</th>
<th>$S_X$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.</strong> During SWS: (continued)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. I watched T.V. lessons intended for other grade levels.</td>
<td>1.3</td>
<td>0.5</td>
</tr>
<tr>
<td>f. I listened to radio lessons intended for other grade levels.</td>
<td>1.1</td>
<td>0.3</td>
</tr>
<tr>
<td>g. My parents insisted that I study my school work before doing anything else.</td>
<td>1.3</td>
<td>0.5</td>
</tr>
<tr>
<td><strong>5.</strong> Are you glad to be back in school?</td>
<td>1.7</td>
<td>0.4</td>
</tr>
<tr>
<td><strong>6.</strong> Have your feelings changed toward:***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>2.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Parents</td>
<td>2.2</td>
<td>0.4</td>
</tr>
<tr>
<td>Teacher(s)</td>
<td>2.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Classmates</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>School Work</td>
<td>2.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Principals</td>
<td>2.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Bus Drivers</td>
<td>2.0</td>
<td>0.4</td>
</tr>
<tr>
<td>T. V.</td>
<td>2.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Radio</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>Newspaper</td>
<td>2.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Books</td>
<td>2.1</td>
<td>0.5</td>
</tr>
<tr>
<td>The Gas Company</td>
<td>1.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Library</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>State Government</td>
<td>1.9</td>
<td>0.5</td>
</tr>
<tr>
<td>City Government</td>
<td>2.0</td>
<td>0.5</td>
</tr>
</tbody>
</table>

**Yes = 2; No = 1**

***Better = 3; No change = 2; Worse = 1***
### RODOSKY TABLE 4

**SURVEY: Parent Survey**

<table>
<thead>
<tr>
<th>ITEM</th>
<th>( \bar{X} )</th>
<th>( S_x )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel school without schools was:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. good - bad</td>
<td>3.8</td>
<td>1.2</td>
</tr>
<tr>
<td>b. meaningful - meaningless</td>
<td>3.6</td>
<td>1.2</td>
</tr>
<tr>
<td>c. unsuccessful - successful</td>
<td>3.6</td>
<td>1.4</td>
</tr>
<tr>
<td>d. incomplete - complete</td>
<td>3.2</td>
<td>1.3</td>
</tr>
<tr>
<td>e. unexplained - explained</td>
<td>3.7</td>
<td>1.3</td>
</tr>
<tr>
<td>f. unexceptional - exceptional</td>
<td>3.7</td>
<td>1.3</td>
</tr>
<tr>
<td>g. useless - useful</td>
<td>3.7</td>
<td>1.4</td>
</tr>
<tr>
<td>h. unorganized - organized</td>
<td>3.9</td>
<td>1.3</td>
</tr>
<tr>
<td>2. I feel my child reacted to SWS the following ways:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. unrewarded - rewarded</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>b. turned-off - turned on</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>c. sad - happy</td>
<td>3.5</td>
<td>1.2</td>
</tr>
<tr>
<td>d. not involved - involved</td>
<td>3.6</td>
<td>1.3</td>
</tr>
<tr>
<td>e. unimportant - important</td>
<td>3.4</td>
<td>1.2</td>
</tr>
<tr>
<td>f. bored - interested</td>
<td>3.3</td>
<td>1.5</td>
</tr>
</tbody>
</table>
RODOSKY TABLE 4 (continued)

**SURVEY:** Parent:Survey

<table>
<thead>
<tr>
<th>ITEM</th>
<th>( \bar{X} )</th>
<th>( S_x )</th>
</tr>
</thead>
</table>
| 2. I feel my child reacted to SWS the following ways: (continued)  
g. inattentive - attentive (1) - (5) | 3.4 | 1.3 |
|h. indifferent - eager (1) - (5) | 3.2 | 1.3 |
i. unconcerned - concerned (1) - (5) | 3.4 | 1.4 |
| 3. During SWS my child:*  
a. watched the T.V. lessons | 2.1 | 1.6 |
b. listened to the radio lessons | 0.6 | 1.2 |
c. did the newspaper lessons | 1.3 | 1.5 |
d. went to the library | 1.0 | 1.1 |
e. met with his/her teacher(s) | 1.6 | 1.2 |
f. did homework | 3.6 | 0.9 |
g. read a school book | 3.1 | 1.2 |
h. did math | 3.0 | 1.3 |
i. worked on a subject other than reading or math | 3.0 | 1.0 |
j. went on field trips | 0.7 | 0.9 |
k. met in a setting other than school | 0.8 | 1.2 |
| 4. I now feel: **  
a. School system | 2.3 | 0.6 |
b. Other parents | 2.2 | 0.4 |
c. Teachers | 2.3 | 0.6 |

* 0 = not at all  3 = three/week  
1 = once/week  4 = more than three/week  
2 = twice/week  ** Better = 3; No change = 2; Worse = 1
RODOSKY TABLE 4 (continued)

**SURVEY:** Parent Survey

<table>
<thead>
<tr>
<th>ITEM</th>
<th>$\bar{x}$</th>
<th>$s_x$</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. State Government</td>
<td>1.9</td>
<td>0.6</td>
</tr>
<tr>
<td>e. School work</td>
<td>2.2</td>
<td>0.5</td>
</tr>
<tr>
<td>f. Principals</td>
<td>2.3</td>
<td>0.5</td>
</tr>
<tr>
<td>g. Bus Drivers</td>
<td>2.1</td>
<td>0.4</td>
</tr>
<tr>
<td>h. T.V.</td>
<td>2.7</td>
<td>0.5</td>
</tr>
<tr>
<td>i. Radio</td>
<td>2.5</td>
<td>0.5</td>
</tr>
<tr>
<td>j. City Government</td>
<td>2.0</td>
<td>0.6</td>
</tr>
<tr>
<td>k. Newspaper</td>
<td>2.7</td>
<td>0.5</td>
</tr>
<tr>
<td>l. Books</td>
<td>2.3</td>
<td>0.5</td>
</tr>
<tr>
<td>m. The Gas Company</td>
<td>1.5</td>
<td>0.6</td>
</tr>
<tr>
<td>n. Library</td>
<td>2.3</td>
<td>0.5</td>
</tr>
</tbody>
</table>

5. During SWS:**
   a. I insisted that my child follow the T.V. lessons. | 1.4 | 0.5 |
   b. I insisted that my child complete the newspaper lessons. | 1.5 | 0.5 |
   c. I was in more contact with my child's teacher(s) than I normally would be during regular school. | 1.2 | 0.4 |
   d. My child watched T.V. lessons intended for other grade levels. | 1.5 | 0.5 |
   e. My child's teacher visited my home. | 1.0 | 0.3 |

* Better = 3; No change = 2; Worse = 1
** Yes = 2; No = 1
E. Survey Results for Parents, Students, and Teachers.

A mail survey was conducted in April 1977 to provide a representative sample of parents, students, and teachers an opportunity to report their experience with the School Without Schools Program. Since much of the data collection in this study was nonrandom and often unrepresentative of any larger populations, the mail survey was planned to confirm or disconfirm many hypotheses that were formed earlier.

The questionnaires were sent during the first week of April 1977 to independent random samples of 200 parents of children in the Columbus Public Schools, 200 students enrolled in the Columbus Public Schools (grades 7-12 only), and 200 teachers employed in the Columbus Public Schools. The response rate for each group, after one follow-up letter sent the first week in May 1977 was as follows:

<table>
<thead>
<tr>
<th>Group</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>79 (39.5%)</td>
</tr>
<tr>
<td>Students</td>
<td>116 (58%)</td>
</tr>
<tr>
<td>Teachers</td>
<td>146 (73%)</td>
</tr>
</tbody>
</table>

Distributions of respondents on such variables as age, grade, number of children, and building assignment caused no concern about response bias. However, the survey results were used only to supplement other sources of data in arriving at conclusion and are not the major source of information for this report.

Findings from the mail survey generally confirmed earlier observations and data generated by the Rodosky Study. Parents were not greatly affected by School Without Schools and did view it as a successful response to the energy crisis. Working at home on assignments, parental help, and one day per week in school were the major sources of instruction during the Program from the parent perspective. Parents did become more aware of school programs in Columbus as a result of the crisis, but they would
prefer school as usual next year.

Students identified homework and one day per week in school as the major sources of instruction during School Without Schools. Assignments in all subjects were a bit heavier than normal. They were neutral about returning to school, but did view School Without Schools as a successful response to the energy shortage. Students were split about whether some form of School Without Schools would be desirable next year regardless of the energy situation. Field trips, meeting in school as a class, and working at home on assignments seemed to be the most popular elements if the Program were to be repeated.

Teachers reported receiving communications about the Program from many sources; staff meetings and radio/TV were the most frequently mentioned. Teachers reported treating their normal curriculum in different ways, verifying earlier observations of high variance among teachers about what they taught. About half reported teaching the same material they would have covered. Those who taught in different subject areas reported normal pupil progress in health, but varying degrees of slippage in mathematics, reading and language arts, science and social studies. These perceptions were based on teacher observations, test results, and other sources of information to teachers. Percent of time teaching different subjects during Schools Without Schools did not drop or change significantly from normal for any subject, although total time obviously was different. Teachers were slightly on the positive side in judging the success of School Without Schools and would much prefer school as usual next year if possible. There did not appear to be any consensus.
by teachers about the type of student that would benefit most from School Without Schools although gifted and high school students were identified most often. Those they thought had been hurt included physically and mentally handicapped and kindergarten-primary students.
PARENT QUESTIONNAIRE
School Without Schools Report

Please answer the following questions about the School Without Schools Program and return this form in the attached stamped envelope.

Thank you, in advance for your time and effort.

1. Number of children attending Columbus Public Schools:

<table>
<thead>
<tr>
<th>Number of children</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>29.1%</td>
</tr>
<tr>
<td>2</td>
<td>32</td>
<td>40.5%</td>
</tr>
<tr>
<td>3</td>
<td>14</td>
<td>17.7%</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6.3%</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>5.1%</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

2. How did School Without Schools affect your life?

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Didn't, or not much</td>
<td>16</td>
<td>21.9%</td>
</tr>
<tr>
<td>Confusion</td>
<td>7</td>
<td>9.6%</td>
</tr>
<tr>
<td>Stress for parents related to works</td>
<td>6</td>
<td>8.2%</td>
</tr>
<tr>
<td>Scheduling problems</td>
<td>6</td>
<td>8.2%</td>
</tr>
<tr>
<td>Transportation problems</td>
<td>5</td>
<td>6.8%</td>
</tr>
<tr>
<td>Babysitting and economic</td>
<td>3</td>
<td>4.1%</td>
</tr>
<tr>
<td>Parent became teacher-positive</td>
<td>6</td>
<td>8.2%</td>
</tr>
<tr>
<td>Parents found teaching difficult</td>
<td>5</td>
<td>6.8%</td>
</tr>
<tr>
<td>Child's education enhanced</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Child's education suffered</td>
<td>5</td>
<td>6.8%</td>
</tr>
<tr>
<td>Greater awareness of children and schools</td>
<td>4</td>
<td>5.5%</td>
</tr>
<tr>
<td>Helped bond family</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Children bored</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>Busier</td>
<td>1</td>
<td>1.4%</td>
</tr>
<tr>
<td>Children home - positive</td>
<td>2</td>
<td>2.7%</td>
</tr>
<tr>
<td>Unrelated answer</td>
<td>2</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

3. Did School Without Schools change your attitude toward the Columbus Public Schools? (Circle one)

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, attitude positive</td>
<td>16</td>
<td>20.0%</td>
</tr>
<tr>
<td>Yes, attitude negative</td>
<td>7</td>
<td>8.8%</td>
</tr>
<tr>
<td>No change, positive</td>
<td>4</td>
<td>5.0%</td>
</tr>
<tr>
<td>No change, negative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficult to interpret</td>
<td>8</td>
<td>10.0%</td>
</tr>
</tbody>
</table>
4. To what extent was the School Without Schools a success? (Circle one)

<table>
<thead>
<tr>
<th>Very Successful</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
<td>18</td>
<td>10</td>
<td>25</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Percent</td>
<td>26.1%</td>
<td>14.5%</td>
<td>36.2%</td>
<td>14.5%</td>
<td>8.7%</td>
</tr>
<tr>
<td>Mean</td>
<td>2.65</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Standard Deviation</td>
<td>1.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Approximately how many hours per day in a typical week during School Without Schools did your child receive education from the following sources? (Write in the number of hours for each day of the week for only those sources that apply.)

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting as a class in a school with the regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting outside the school with the regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T.V. Instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio Instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper Instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting help from you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working at home on assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Item 5: Cell entries are means, standard deviations, medians, and ranges, respectively.

<table>
<thead>
<tr>
<th>Source</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Field Trips</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting as a class in a school with the regular</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>1.6</td>
</tr>
<tr>
<td>teacher</td>
<td>0.8</td>
<td>1.0</td>
<td>1.0</td>
<td>0.8</td>
<td>1.0</td>
<td>2.7</td>
</tr>
<tr>
<td>0-12</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Meeting outside the school with the regular</strong></td>
<td>1.0</td>
<td>1.2</td>
<td>1.2</td>
<td>1.1</td>
<td>1.1</td>
<td>5.6</td>
</tr>
<tr>
<td>teacher</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>2.4</td>
<td>2.2</td>
<td>5.5</td>
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<td>0-8</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>TV instruction</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>0.4</td>
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<td>1.8</td>
</tr>
<tr>
<td>0.8</td>
<td>1.3</td>
<td>0.8</td>
<td>1.2</td>
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<td>0.8</td>
<td>3.4</td>
</tr>
<tr>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Radio instruction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.7</td>
<td>0.6</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.6</td>
<td>3.2</td>
</tr>
<tr>
<td>1.0</td>
<td>0.8</td>
<td>1.0</td>
<td>1.0</td>
<td>0.9</td>
<td>0.9</td>
<td>4.2</td>
</tr>
<tr>
<td>0.5</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>2.0</td>
</tr>
<tr>
<td><strong>Newspaper instruction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
<td>0.8</td>
</tr>
<tr>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>0.5</td>
<td>2.5</td>
</tr>
<tr>
<td>0.0</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Getting help from you</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td>0.4</td>
<td>0.3</td>
<td>1.7</td>
</tr>
<tr>
<td>0.6</td>
<td>0.6</td>
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<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>2.8</td>
</tr>
<tr>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Working at home on assignments</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.5</td>
<td>1.4</td>
<td>1.5</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
<td>6.9</td>
</tr>
<tr>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>6.5</td>
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<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td><strong>Other (please specify)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0.3</td>
<td>0.2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.1</td>
<td>0.1</td>
<td>0.5</td>
</tr>
<tr>
<td>1.8</td>
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<td>0.5</td>
<td>0.8</td>
<td>0.7</td>
<td>0.7</td>
<td>2.5</td>
</tr>
<tr>
<td>0.0</td>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1.5</td>
<td>1.4</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
<td>6.9</td>
</tr>
<tr>
<td>1.3</td>
<td>1.4</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>6.5</td>
</tr>
<tr>
<td>1.0</td>
<td>1.0</td>
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<td>1.0</td>
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</tr>
<tr>
<td>0-15</td>
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<td>0.5</td>
<td>0.4</td>
<td>0.4</td>
<td>0.2</td>
</tr>
</tbody>
</table>

311
6. (a) Next Winter, suppose there will be no energy problem and the schools have plenty of gas. Which of the following would you prefer? (Check one)

- School during the Winter as usual.
- Some form of School Without Schools in February.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>School during the Winter as usual.</td>
<td>61</td>
</tr>
<tr>
<td>Some form of School Without Schools in February.</td>
<td>15</td>
</tr>
</tbody>
</table>

(b) If you check the second option, which of the following would you want to see included? (Check all that apply)

<table>
<thead>
<tr>
<th>Field Trips.</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Trips.</td>
<td>11</td>
<td>73.3</td>
</tr>
<tr>
<td>Meeting as a class in a school with the regular teachers</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Meeting outside the school with the regular teacher(s)</td>
<td>7</td>
<td>46.7</td>
</tr>
<tr>
<td>T. V. Instruction</td>
<td>11</td>
<td>73.3</td>
</tr>
<tr>
<td>Radio Instruction</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Newspaper Instruction</td>
<td>5</td>
<td>33.3</td>
</tr>
<tr>
<td>Working at home on assignments</td>
<td>12</td>
<td>80.0</td>
</tr>
<tr>
<td>Other (please describe)</td>
<td>3</td>
<td>20.0</td>
</tr>
</tbody>
</table>

7. I have become more aware of the school programs in Columbus as a result of this crisis? (Circle one)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent</td>
<td>75</td>
<td>26</td>
</tr>
</tbody>
</table>
STUDENT QUESTIONNAIRE
School Without Schools Report

Please answer the following questions about the School Without Schools Program and return this form in the attached stamped envelope. Thank you, in advance, for your time and effort.

1. Your current grade level: ________ grade

<table>
<thead>
<tr>
<th>Grade</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>Continuing Education</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>16</td>
<td>17</td>
<td>19</td>
<td>22</td>
<td>28</td>
<td>11</td>
<td>1</td>
<td>2</td>
<td>115</td>
</tr>
<tr>
<td>Percent</td>
<td>13.8</td>
<td>14.7</td>
<td>16.4</td>
<td>19.0</td>
<td>24.1</td>
<td>9.5</td>
<td>0.9</td>
<td>1.7</td>
<td>100</td>
</tr>
</tbody>
</table>

2. Your age: ________ years

<table>
<thead>
<tr>
<th>Age</th>
<th>12</th>
<th>13</th>
<th>14</th>
<th>15</th>
<th>16</th>
<th>17</th>
<th>18</th>
<th>19</th>
<th>Missing</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency</td>
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<td>15</td>
<td>18</td>
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<td>21</td>
<td>9</td>
<td>2</td>
<td>1</td>
<td>116</td>
</tr>
<tr>
<td>Percent</td>
<td>5.2</td>
<td>12.9</td>
<td>15.5</td>
<td>19.0</td>
<td>19.0</td>
<td>18.1</td>
<td>7.8</td>
<td>1.7</td>
<td>0.9</td>
<td>100</td>
</tr>
</tbody>
</table>

3. How many hours per day in a typical week did you work on schoolwork during School Without Schools using the following types of schoolwork? (Write in the number of hours for each day of the week for only the types of schoolwork that you used.)

<table>
<thead>
<tr>
<th>Types of Schoolwork</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting as a class in a school with your regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting outside the school with your regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working at home on assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please describe)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

313
Item 3: Cell entries are means, standard deviations, medians, and ranges respectively.

<table>
<thead>
<tr>
<th>Types of Schoolwork</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field trips</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
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<td>0.7</td>
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<tr>
<td></td>
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<td>0.7</td>
<td>1.8</td>
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<td>0.0</td>
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</tr>
<tr>
<td></td>
<td>0-3</td>
<td>0-3</td>
<td>0-3</td>
<td>0-6.5</td>
<td>0-4</td>
<td>0-13</td>
</tr>
<tr>
<td>Meeting as a class in a school with your regular teacher</td>
<td>1.3</td>
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<td>0.4</td>
<td>5.7</td>
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<td>1.9</td>
<td>1.3</td>
<td>4.9</td>
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<td>0-8</td>
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<td>0-7</td>
<td>0-30</td>
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<td>0.2</td>
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<td>0-8</td>
<td>0-6</td>
<td>0-5</td>
<td>0-8</td>
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<tr>
<td>TV instruction</td>
<td>0.3</td>
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<td>0-15</td>
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<td>0.1</td>
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<td>0-5</td>
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<tr>
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<td>0.1</td>
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<td>0.0</td>
<td>0.0</td>
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<td>0-2</td>
<td>0-2</td>
<td>0-2</td>
<td>0-10</td>
</tr>
<tr>
<td>Working at home on assignments</td>
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<td>1.3</td>
<td>1.3</td>
<td>1.2</td>
<td>6.7</td>
</tr>
<tr>
<td></td>
<td>1.4</td>
<td>1.2</td>
<td>1.8</td>
<td>1.2</td>
<td>1.2</td>
<td>5.4</td>
</tr>
<tr>
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<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>1.0</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>0-8</td>
<td>0-5</td>
<td>0-8</td>
<td>0-5</td>
<td>0-5</td>
<td>0-27</td>
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<tr>
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<td>0-3.8</td>
<td>0-3.8</td>
<td>0-18</td>
</tr>
</tbody>
</table>
4. How did your assignments in each of the following subjects during School Without Schools compare with your regular program? (Circle one for each subject.)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>during SWS</td>
<td>dur. SWS</td>
<td>SWS</td>
<td>dur. SWS</td>
</tr>
<tr>
<td>Health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Reading, Language, English</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Mean</th>
<th>Std.Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
<td>5</td>
<td>18</td>
<td>9</td>
<td>7</td>
<td>7.1%</td>
<td>3.3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>10</td>
<td>12</td>
<td>32</td>
<td>28</td>
<td>13</td>
<td>10.5%</td>
<td>3.2</td>
</tr>
<tr>
<td>Reading, Language, English</td>
<td>13</td>
<td>21</td>
<td>29</td>
<td>35</td>
<td>12</td>
<td>11.8%</td>
<td>3.1</td>
</tr>
<tr>
<td>Science</td>
<td>10</td>
<td>10</td>
<td>19</td>
<td>19</td>
<td>8</td>
<td>15.2%</td>
<td>3.7</td>
</tr>
<tr>
<td>Social Studies</td>
<td>6</td>
<td>14</td>
<td>36</td>
<td>23</td>
<td>15</td>
<td>5.2%</td>
<td>3.3</td>
</tr>
</tbody>
</table>

5. How did you feel about returning to school full time after School Without Schools? (Circle one)

<table>
<thead>
<tr>
<th>Very Happy</th>
<th>Very Sad</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
</tr>
<tr>
<td>Normal.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
</tbody>
</table>

Mean: 3.0  
Standard Deviation: 1.1  
Median: 3.0
6. To what extent was the School Without Schools a success? (Circle one)

<table>
<thead>
<tr>
<th></th>
<th>Very Successful</th>
<th>Very Unsuccessful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Frequency</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Percent</td>
<td>26.1</td>
<td>27.0</td>
</tr>
</tbody>
</table>

Mean: 2.5  
Standard Deviation: 1.2  
Median: 2

7. Next year, suppose there is no energy problem and the schools have plenty of gas. Which of the following would you prefer? (Check one)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>School during the winter as usual.</td>
<td>59</td>
</tr>
<tr>
<td>Some form of School Without Schools in February.</td>
<td>53</td>
</tr>
</tbody>
</table>

If you checked the second option, which of the following would you want to see included? (Check ✓ all that apply)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Trips</td>
<td>35</td>
</tr>
<tr>
<td>Meeting as a class in a school with the regular teacher</td>
<td>35</td>
</tr>
<tr>
<td>Meeting outside the school with the regular teacher</td>
<td>16</td>
</tr>
<tr>
<td>T.V. Instruction</td>
<td>19</td>
</tr>
<tr>
<td>Radio Instruction</td>
<td>11</td>
</tr>
<tr>
<td>Newspaper Instruction</td>
<td>16</td>
</tr>
<tr>
<td>Working at home on assignments</td>
<td>43</td>
</tr>
<tr>
<td>Other (please describe)</td>
<td>8</td>
</tr>
</tbody>
</table>
Please answer the following questions about the School Without Schools Program and return in the attached stamped envelope. Thank you, in advance, for your time and effort.

1. School Respondent Distribution

<table>
<thead>
<tr>
<th>SENIOR HIGH SCHOOLS</th>
<th>ELEMENTARY SCHOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Beechcroft Jr. Sr.</td>
<td>301 Alpine</td>
</tr>
<tr>
<td>101 Briggs</td>
<td>302 Alum Crest</td>
</tr>
<tr>
<td>102 Brookhaven</td>
<td>303 Arlington Park</td>
</tr>
<tr>
<td>103 Centennial</td>
<td>304 Avondale</td>
</tr>
<tr>
<td>104 Central</td>
<td>305 Barnett</td>
</tr>
<tr>
<td>105 East</td>
<td>306 Beatty Park</td>
</tr>
<tr>
<td>106 Eastmoor Sr.</td>
<td>307 Beaumont</td>
</tr>
<tr>
<td>107 Independence Jr. Sr.</td>
<td>308 Beck</td>
</tr>
<tr>
<td>108 Linden McKinley</td>
<td>309 Bellows</td>
</tr>
<tr>
<td>109 Ma-ion Franklin</td>
<td>310 Berwick</td>
</tr>
<tr>
<td>110 Mifflin Jr. Sr.</td>
<td>311 Binns</td>
</tr>
<tr>
<td>111 Mohawk Jr. Sr.</td>
<td>312 Brentnell</td>
</tr>
<tr>
<td>112 North</td>
<td>313 Broadleigh</td>
</tr>
<tr>
<td>113 Northland</td>
<td>314 Burroughs</td>
</tr>
<tr>
<td>114 South</td>
<td>315 Calumet</td>
</tr>
<tr>
<td>115 Walnut Ridge</td>
<td>316 Cassidy</td>
</tr>
<tr>
<td>116 West</td>
<td>317 Cedarwood</td>
</tr>
<tr>
<td>117 Wheatstone</td>
<td>318 Chicago</td>
</tr>
<tr>
<td>118 Adult Day-Evening</td>
<td>319 Clarfield</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>JUNIOR HIGH SCHOOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>200 Barrett</td>
</tr>
<tr>
<td>201 Beery</td>
</tr>
<tr>
<td>202 Buckeye</td>
</tr>
<tr>
<td>203 Champion</td>
</tr>
<tr>
<td>204 Clinton Jr.</td>
</tr>
<tr>
<td>205 Crestview Jr.</td>
</tr>
<tr>
<td>206 Dominion</td>
</tr>
<tr>
<td>207 Eastmoor Jr.</td>
</tr>
<tr>
<td>208 Everett</td>
</tr>
<tr>
<td>209 Franklin</td>
</tr>
<tr>
<td>210 Hilltonia</td>
</tr>
<tr>
<td>211 Indianola Jr.</td>
</tr>
<tr>
<td>212 Johnson Park</td>
</tr>
<tr>
<td>213 Linnmoor</td>
</tr>
<tr>
<td>214 McGuffey Jr.</td>
</tr>
<tr>
<td>215 Medina</td>
</tr>
<tr>
<td>216 Monroe</td>
</tr>
<tr>
<td>217 Ridgeview</td>
</tr>
<tr>
<td>218 Roosevelt</td>
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<tr>
<td>219 Sherwood</td>
</tr>
<tr>
<td>220 Southmoor</td>
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<tr>
<td>221 Sterling</td>
</tr>
<tr>
<td>222 Wedgewood</td>
</tr>
<tr>
<td>223 Westmoor</td>
</tr>
<tr>
<td>224 Woodward Park</td>
</tr>
<tr>
<td>225 Yorktown</td>
</tr>
<tr>
<td>226 A.G. Bell</td>
</tr>
<tr>
<td>227 Clearbrook</td>
</tr>
<tr>
<td>228 Colerain</td>
</tr>
</tbody>
</table>

2. Highlan
2. Your age ____________ years

Mean: 38.2
Standard Deviation 10.5
Median 36.5
3. What grade(s) do you currently teach? _____________ grade(s)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Frequency</th>
<th>Percent</th>
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<td>23</td>
<td>15.8</td>
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<tr>
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</tr>
<tr>
<td>5</td>
<td>15</td>
<td>10.3</td>
</tr>
<tr>
<td>6</td>
<td>19</td>
<td>13.0</td>
</tr>
<tr>
<td>7</td>
<td>23</td>
<td>15.8</td>
</tr>
<tr>
<td>8</td>
<td>28</td>
<td>19.2</td>
</tr>
<tr>
<td>9</td>
<td>30</td>
<td>20.5</td>
</tr>
<tr>
<td>10</td>
<td>27</td>
<td>18.5</td>
</tr>
<tr>
<td>11</td>
<td>27</td>
<td>18.5</td>
</tr>
<tr>
<td>12</td>
<td>28</td>
<td>19.2</td>
</tr>
<tr>
<td>Missing</td>
<td>8</td>
<td>5.5</td>
</tr>
</tbody>
</table>
4. If applicable, what subject(s) do you currently teach?

<table>
<thead>
<tr>
<th>Subject</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counselor</td>
<td>5</td>
</tr>
<tr>
<td>Driver's Education</td>
<td>1</td>
</tr>
<tr>
<td>General Elementary</td>
<td>55</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3</td>
</tr>
<tr>
<td>Problems of Democracy</td>
<td>1</td>
</tr>
<tr>
<td>Math</td>
<td>4</td>
</tr>
<tr>
<td>Algebra-Geometry</td>
<td>1</td>
</tr>
<tr>
<td>Math EMR</td>
<td>2</td>
</tr>
<tr>
<td>Math Advanced Placement</td>
<td>1</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>2</td>
</tr>
<tr>
<td>Special Education EMR</td>
<td>4</td>
</tr>
<tr>
<td>Speech and Hearing Therapy</td>
<td>4</td>
</tr>
<tr>
<td>Visually Impaired</td>
<td>2</td>
</tr>
<tr>
<td>LBD</td>
<td>2</td>
</tr>
<tr>
<td>Reading</td>
<td>1</td>
</tr>
<tr>
<td>English</td>
<td>5</td>
</tr>
<tr>
<td>Primary Language Development</td>
<td>3</td>
</tr>
<tr>
<td>Data Processing</td>
<td>1</td>
</tr>
<tr>
<td>Intensive Office Education</td>
<td>1</td>
</tr>
<tr>
<td>Occupational Work Adjustment</td>
<td>2</td>
</tr>
<tr>
<td>Distributive Educ.</td>
<td>2</td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>1</td>
</tr>
<tr>
<td>Machine Shop</td>
<td>1</td>
</tr>
<tr>
<td>Drafting</td>
<td>2</td>
</tr>
<tr>
<td>Hume Economics</td>
<td>3</td>
</tr>
<tr>
<td>Auto Body</td>
<td>1</td>
</tr>
<tr>
<td>Life Science</td>
<td>1</td>
</tr>
<tr>
<td>General Science</td>
<td>2</td>
</tr>
<tr>
<td>Vocal Music</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Health Science</td>
<td>1</td>
</tr>
<tr>
<td>Music</td>
<td>1</td>
</tr>
<tr>
<td>More than 1 subject listed</td>
<td>23</td>
</tr>
<tr>
<td>MV</td>
<td>3</td>
</tr>
</tbody>
</table>
5. What communication channels did you find to be most effective for getting information about School Without Schools while the program was operating?

<table>
<thead>
<tr>
<th>Channel</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>grapevine</td>
<td>30</td>
<td>21.5</td>
</tr>
<tr>
<td>staff meetings</td>
<td>85</td>
<td>58.2</td>
</tr>
<tr>
<td>memos from the principal</td>
<td>60</td>
<td>41.1</td>
</tr>
<tr>
<td>the central administration's Handbook</td>
<td>24</td>
<td>16.4</td>
</tr>
<tr>
<td>Handbook for School Without Schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>radio and/or TV</td>
<td>80</td>
<td>54.8</td>
</tr>
<tr>
<td>personal conversations with administrators</td>
<td>52</td>
<td>35.6</td>
</tr>
<tr>
<td>newspaper</td>
<td>51</td>
<td>34.9</td>
</tr>
<tr>
<td>other, please specify</td>
<td>11</td>
<td>7.5</td>
</tr>
</tbody>
</table>

6. (a) In what way, if any, did you deviate from your normal curriculum during School Without Schools?

<table>
<thead>
<tr>
<th>Deviation Description</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>covered same material I would have covered</td>
<td>80</td>
<td>55.6</td>
</tr>
<tr>
<td>omitted the following material</td>
<td>37</td>
<td>25.7</td>
</tr>
<tr>
<td>covered different material</td>
<td>45</td>
<td>31.3</td>
</tr>
<tr>
<td>took more field trips than I would have taken</td>
<td>45</td>
<td>31.7</td>
</tr>
</tbody>
</table>
7. (a) What did you find about pupil progress in each of the following areas: (Circle one for each area)

<table>
<thead>
<tr>
<th>Area</th>
<th>Below Normal</th>
<th>Normal</th>
<th>Way Above Normal</th>
<th>Didn't Teach This</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Mathematics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Reading, Language, Arts, English</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Science</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Social Studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(b) What is your primary basis for this estimate? (Check ✓ one)

- test results
- observation of pupils
- other (please specify)

<table>
<thead>
<tr>
<th>Area</th>
<th>Mean</th>
<th>Std.Dv.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Mathematics</td>
<td>2.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Reading, Language, Arts, English</td>
<td>2.8</td>
<td>0.8</td>
</tr>
<tr>
<td>Science</td>
<td>2.6</td>
<td>2.9</td>
</tr>
<tr>
<td>Social Studies</td>
<td>3.0</td>
<td>0.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basis</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>test results</td>
<td>62</td>
<td>46.3</td>
</tr>
<tr>
<td>observation of pupils</td>
<td>80</td>
<td>59.7</td>
</tr>
<tr>
<td>other (please specify)</td>
<td>34</td>
<td>25.8</td>
</tr>
</tbody>
</table>
8. Approximately what percent of your time was spent teaching in each of the following subject areas during School Without Schools?

Health ______ % of time
Mathematics ______ % of time
Reading, Language Arts, English ______ % of time
Science ______ % of time
Social Studies ______ % of time

<table>
<thead>
<tr>
<th>Subject</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>4.1</td>
<td>13.8</td>
</tr>
<tr>
<td>Mathematics</td>
<td>25.5</td>
<td>28.0</td>
</tr>
<tr>
<td>Reading, Language Arts, English</td>
<td>38.7</td>
<td>33.4</td>
</tr>
<tr>
<td>Science</td>
<td>5.5</td>
<td>17.0</td>
</tr>
<tr>
<td>Social Studies</td>
<td>11.8</td>
<td>22.4</td>
</tr>
</tbody>
</table>

9. Approximately what percent of your time is normally spent teaching in each of the following subject areas?

Health ______ % of time
Mathematics ______ % of time
Reading, Language Arts, English ______ % of time
Science ______ % of time
Social Studies ______ % of time

<table>
<thead>
<tr>
<th>Subject</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>5.5</td>
<td>12.7</td>
</tr>
<tr>
<td>Mathematics</td>
<td>22.4</td>
<td>26.0</td>
</tr>
<tr>
<td>Reading, Language Arts, English</td>
<td>35.5</td>
<td>31.1</td>
</tr>
<tr>
<td>Science</td>
<td>8.0</td>
<td>10.4</td>
</tr>
<tr>
<td>Social Studies</td>
<td>32.3</td>
<td>12.1</td>
</tr>
</tbody>
</table>
10. To what extent was the School Without Schools a success? (Circle one)

<table>
<thead>
<tr>
<th>Very Successful</th>
<th>Very Unsuccessful</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>1    2    3    4    5</td>
</tr>
<tr>
<td>Percent</td>
<td>17   21   61  38   4</td>
</tr>
</tbody>
</table>

Mean: 2.9
Standard Deviation: 1.0

11. (a) Next winter, suppose there will be no energy problem and the schools have plenty of gas. Which of the following would you prefer? (Check ✓ one)

- School during the winter as usual. Frequency: 126, Percent: 87.5.
- Some form of School Without Schools in February. Frequency: 18, Percent: 12.5

(b) If you checked the second option, which of the following would you want to see included? (Check ✓ all that apply)

- Field trips Frequency: 16
- Meeting as a class in school with the regular teachers Frequency: 11
- Meeting outside the school with regular teachers Frequency: 13
- TV Instruction Frequency: 13
- Radio Instruction Frequency: 4
- Newspaper Instruction Frequency: 9
- Working at home assignments Frequency: 12
- Other (Please describe) Frequency: 2
12. (a) If you favor some form of School Without Schools, for what groups would it be most appropriate? (Check all that apply)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>18</td>
</tr>
<tr>
<td>Primary</td>
<td>26</td>
</tr>
<tr>
<td>Upper Grades</td>
<td>31</td>
</tr>
<tr>
<td>Junior high or middle school</td>
<td>34</td>
</tr>
<tr>
<td>High school</td>
<td>46</td>
</tr>
<tr>
<td>Gifted students</td>
<td>56</td>
</tr>
<tr>
<td>Typical students</td>
<td>28</td>
</tr>
<tr>
<td>Mentally handicapped</td>
<td>13</td>
</tr>
<tr>
<td>Physically handicapped</td>
<td>11</td>
</tr>
<tr>
<td>Others (please specify)</td>
<td>5</td>
</tr>
</tbody>
</table>

(b) For what groups of students might SWS do more harm than good? (Check all that apply)

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kindergarten</td>
<td>50</td>
</tr>
<tr>
<td>Primary</td>
<td>55</td>
</tr>
<tr>
<td>Upper grades</td>
<td>23</td>
</tr>
<tr>
<td>Junior high or middle school</td>
<td>27</td>
</tr>
<tr>
<td>High school</td>
<td>26</td>
</tr>
<tr>
<td>Gifted students</td>
<td>8</td>
</tr>
<tr>
<td>Typical students</td>
<td>33</td>
</tr>
<tr>
<td>Mentally handicapped</td>
<td>60</td>
</tr>
<tr>
<td>Physically handicapped</td>
<td>44</td>
</tr>
<tr>
<td>Others (please specify)</td>
<td>27</td>
</tr>
</tbody>
</table>
CHAPTER IV
CONCLUSIONS BY OBJECTIVE OF THE STUDY

A. To describe the context of School Without Schools

Context information is provided in Chapter I of this Report.

The most noteworthy context factors found by the principal investigators were as follows:

1. The good relationship of the Columbus Public Schools with all segments of the community -- parents, city and state government leaders, science organizations, business people, media leaders

2. The good relationship of the Columbus Public Schools central administration with the School Board and teachers union

3. The strong second and third level administrative staff of the Columbus Public Schools

4. The accessibility of the state legislature

5. The cooperation of public and parochial school administrations in Columbus

6. The extensive community resources available for educating children outside the public school building.

7. Prior planning for a crisis contingency program in the event schools would be shut down

8. The nature of the crisis -- a natural disturbance (vs. a civil disturbance)

B. To characterize the design of the School Without Schools Program

The design for the program was extensive and detailed. Furthermore, it was compiled and distributed to school personnel on short notice (within a week's time). Important elements of the design may be categorized as follows:

1. Communication
   - to school personnel
   - to students and parents
   - to the community
Communication efforts included: (1) The School Without Schools Handbook made available to all school personnel and supplemented with written daily bulletins; (2) a telephone hotline; (3) a war room (of telephones) for school building personnel to arrange field trips and have questions answered; (4) daily bulletins in the newspapers and over radio and television; (5) daily meetings of the administrative cabinet, periodic meetings with school principals, and constant contact with the teachers' union.

2. Program

Instruction occurred via field trips, meeting one day per week in a school building, meeting outside the school with instructors, television, radio, newspapers, and working at home on assignments. A crucial factor that probably had a negative influence on the program was the early decision that participation by students in the out-of-school part of the program was optional.

3. Facilities

Facility maintenance was achieved by detailed mothballing procedures by district custodial staff for those buildings that were closed and by regular maintenance procedures for those buildings left open. Safety and security were prime concerns when buildings were closed. Support personnel, such as the evaluation unit in the Columbus Public Schools, were used to aid in the maintenance of facilities.

4. Transportation

Bussing students for field trips and scheduling new bus routes for the one day per week in-school sessions were the main concerns in transportation. Safety of children attending school functions received considerable attention.

The following pages contain verbatim information about the design of the program supplied by the media and by Columbus Public Schools personnel. This information is provided in its full detail so that others who might want to implement a similar program can benefit. If readers wish to skip this section they may move on to page...
A. Introductory Memo From the Superintendent
   - Resolution adopted by the Board on February 1.
   - News release distributed on February 1

B. Where to Find Us
   - Emergency Communications Post
   - School offices
   - Departmental offices
   - People

C. Use of Board Facilities
   - What's available
   - How to use it
   - Transportation

D. Use of Community Facilities
   - What's available
   - How to reserve it
   - Transportation

E. Teaching by TV
   - WBNS (Channel 10)
   - WCMH (Channel 4)
   - WOSU (Channel 34)

F. Teaching by Radio
   - WCBE (90.5 mHz)
   - WBNS (1460 kHz)

G. Teaching by Newspapers
   - "Classroom Extra: in the Dispatch"

H. Division of Administration Information

I. Division of Business Affairs Information

J. Division of Instruction Information

K. Division of Personnel Information

L. Division of Special Services Information
With the latest Columbia Gas curtailment of 85%, the Columbus Schools have only enough gas to last until February 17. The gas allocation would then be totally gone. In order to avoid the prohibitively expensive process of mothballing schools, the schools should be closed now, and we would need to remain closed until April 3 when the new allocation begins.

In short, we face a crisis of monumental proportions. Relying solely on voluntary measures at this stage is unrealistic. Permitting various school districts to do "their own thing" will create even more problems. We need a state-wide plan with legislative or administrative relief from current legal requirements.

Listed below are suggestions that ought to be part of whatever plan is adopted:

1. The current calendar requirement of 182 days should be modified.
   A number of emergency days should be designated -- perhaps a maximum of 30. Legislation should be enacted that would make it unnecessary to make up at least one half of the days lost because of the energy crisis.

2. If schools are closed, we face substantial unemployment compensation payments that would be an added expense. Some relief should be provided either through state reimbursement to school districts or enabling districts to pay personnel for all or a portion of the energy days.
3. Consideration should be given to developing alternative educational efforts while schools are closed, such as radio, television, newspaper lessons, plus home tutoring, home visits, telephone tutoring, or special centers established in the recreation centers, churches, or buildings that have available fuel. This is complex and fraught with problems, but if school personnel are paid for the days schools are closed, they should be available to provide service to the students on whatever basis is feasible.

4. Schools should not be mothballed. The problems of draining the water, cutting pipes, putting antifreeze in traps, etc., are more substantial than most people realize. Extensive damage is highly probable, including structural damage, wood floors buckling, paint coming off the walls and freeze-ups due to the residual water remaining in the lines. Gas must be provided to maintain temperatures to avoid freezing.

5. Flexibility in the State plan should exist to enable those school districts with alternative fuels to continue to operate if such operation does not further jeopardize industries or schools in their own or other areas. Closing everyone at the same time is the simplest approach, but flexibility is the better approach.

6. Provisions to make up days lost should be flexible. Adding an hour per day to the school calendar should be permitted, with one day of credit counted for each additional five hours completed as one possible way of making up days lost.
7. All holidays and school recesses that were scheduled in the calendar during the remaining days in the school year should be rescheduled as part of the time school is closed during the energy emergency.

8. Schools should be assured that when they close for 30 days or a similar extended period that upon reopening they can continue without further interruption.
Memo

To: The School Staff
From: John Ellis
Date: February 2, 1977

Now that the Board of Education has taken official action to close schools at the end of the day on Friday, February 4, and to endorse the "School Without Schools" project, we are challenged to make the most of the unique opportunities that lie before us.

Having "School Without Schools" will be difficult. The logistics confronting school personnel already are mind-boggling. Conditions will change from day to day, once we launch on Monday, February 7. The force of circumstance will require each employee of the Board to reach deeply within the wellsprings of imagination and ingenuity.

Above all, we must communicate. Toward that end, we have taken several steps. First, we have compiled this Handbook. I hope you will note that it is long on information about educational opportunities and short on administrative directives. This is in keeping with the philosophy behind the "School Without Schools" project.

Because this Handbook is incomplete and will be updated as new information becomes available, I suggest that you place these materials in a three-ring notebook set aside exclusively for this project.

Several other lines of communication will be open to you throughout the project, including:

- A bulletin in each daily newspaper, beginning with the Dispatch on Sunday, February 6, and the Citizen-Journal on Monday, February 7.
- A brief radio report on new project developments, to be broadcast over WCBE at 3:30 p.m. each day, beginning Monday, February 7.
- Daily mail deliveries to the "project office location" of each school, beginning Monday, February 7.
- An Emergency Communications Post at the Education Center, to be activated at 1 p.m. on Thursday, February 3. (For a list of these phone numbers, see Part B of this Handbook.)

Fortunately for all of us, there is no cookbook for "School Without Schools." Any suggestions you, your teachers, or parents have will be appreciated by the central office staff. Don't hesitate to send them in or phone them in to us.

Best wishes for every success and satisfaction in conducting this project. May our great city make the most of this opportunity!
RESOLUTION REGARDING THE NATURAL GAS CRISIS

WHEREAS, Governor James A. Rhodes on January 27, 1977, declared a statewide natural gas crisis under powers granted in Section 122.87 of the Ohio Revised Code; and

WHEREAS, Mayor Tom Moody promptly issued a similar declaration applicable to the city of Columbus; and

WHEREAS, the President Pro Tempore of the Ohio Senate and the Speaker of the Ohio House of Representatives on January 28, 1977, issued a statement proposing "to authorize, through temporary legislation, an additional 15 days to the schedule of closures for response to energy shortages"; and

WHEREAS, the Columbus Public Schools have conducted an exemplary program to conserve natural gas only to be faced with rapidly escalating curtailments applied by Columbia Gas of Ohio, Inc.; and

WHEREAS, said curtailments of Columbia Gas have reached the prohibitive level of 85% for 45 Board-owned facilities, a level tantamount to the unilateral closing of schools by Columbia Gas; and

WHEREAS, the school system has explored every conceivable avenue for relief from the curtailment levels imposed by Columbia Gas; and

WHEREAS, realistic calculations indicate that the supply of natural gas allocated to the Columbus Public Schools will be exhausted on or about February 17, 1977; and

WHEREAS, prudence dictates that the school system's rapidly dwindling supply of natural gas be used so as to prevent costly structural damages or other harmful effects to school facilities;

NOW, THEREFORE, BE IT RESOLVED: That the Columbus Board of Education recognize the existence of a crisis of such proportions that the only reasonable course of action available to the Board is to cause all schools to be closed effective at the end of the school day on Friday, February 4, 1977.

BE IT FURTHER RESOLVED: That the school administration be authorized and directed to employ such measures as are required to protect and secure all Board-owned facilities serviced by natural gas.

BE IT FURTHER RESOLVED: That the school administration plan with the school staff for the most effective educational utilization, from February 7 through February 25, 1977, inclusive, of all other Board-owned facilities and such community facilities as are offered voluntarily and
without charge to the Board, provided that each such community facility 
is determined by a member of the administrative staff to meet reasonable 
standards of safety and fitness for the educational purpose intended, and 
is included on a list of approved facilities compiled by the Superintendent 
of Schools, which list shall include all publicly-owned facilities made 
available to the Board by the Mayor of Columbus.

BE IT FURTHER RESOLVED: That the Board express its support for the 
"School Without Schools" project, which shall be conducted between 
February 7 and February 25, 1977, and which shall feature imaginative 
scheduling of pupils into schools serviced by alternative sources of 
energy, television and radio lessons on commercial stations as well as 
WCBE, newspaper education activities, instructional activities in a 
variety of municipal facilities made available to the Board by the Mayor 
of Columbus, and a wide range of creative learning experiences in private 
facilities donated to the Board.

BE IT FURTHER RESOLVED: That the Board request parents and pupils 
to cooperate with all segments of the school staff and the community in 
helping the "School Without Schools" project realize its fullest potential.

BE IT FURTHER RESOLVED: That the Board express special thanks to all 
community organizations, institutions, and media which have already offered 
to contribute materially to the implementation of the "School Without 
Schools" project; and specifically request that the administration maintain 
a complete log of all such contributions during the course of said project 
so that the contributions of the community may be spread upon the minutes 
of the Board and duly recognized.

BE IT FURTHER RESOLVED: That the Board approve the attached "Memorandum 
of Agreement" with the Columbus Education Association, containing provisions 
relating to "Calendar Changes" and "Emergency Guidelines," and authorize and 
direct the President of the Board and the Superintendent of Schools to affix 
their signatures to said "Memorandum of Agreement."

BE IT FURTHER RESOLVED: That holidays previously scheduled for 
classified employees and educational aides during the week of April 11, 
1977, shall occur during the week of February 28, 1977.

BE IT FURTHER RESOLVED: That classified employees and educational 
aides who elect an unpaid status during this period shall be considered 
to be on a Board-approved leave of absence.

BE IT FURTHER RESOLVED: That all use of building contracts for all 
Columbus Public School buildings by outside organizations be suspended 
for the duration of the emergency, effective at the close of business on 
Friday, February 4, 1977.

BE IT FURTHER RESOLVED: That all schools be reopened on Monday, 
March 7, 1977.
MEMORANDUM OF AGREEMENT

The Columbus Board of Education and the Columbus Education Association hereby agree to the following school calendar changes and to the guidelines set forth herein relative to the emergency closing of most Columbus Public School buildings as a result of the natural gas shortage currently being experienced by the Columbus Public Schools:

Calendar Changes

1. The Professional Meeting day previously scheduled for February 21, 1977 shall be eliminated. An Emergency Planning day shall be observed Wednesday, February 2, 1977 as a day for teachers to plan with their building administrators for activities to take place during the emergency closing. At least half of said Emergency Planning day shall be reserved for individual preparations by teachers.

2. The spring break days previously scheduled for April 11 through 15, 1977 shall be observed as a winter break to be scheduled February 28 through March 4, 1977.

Emergency Guidelines

1. The Columbus Board of Education and the teachers of the Columbus Public Schools, represented by the Columbus Education Association, shall endeavor, during the period of emergency closing to provide the best possible education for pupils of the school system under the emergency conditions by utilizing available community facilities and resources in addition to available school system facilities and resources.

2. During the period of emergency closing teachers shall be assigned duties or shall undertake duties usually associated with the teaching profession and shall not be assigned duties of a "make work" nature, extensive clerical duties, or assignments not usually associated with the teaching profession.

3. Participation in the programs designed for presentation in the media shall be on a voluntary basis.

4. Participation in activities beyond the normal work day of teachers shall be on a voluntary basis.

5. Teachers shall have no less than the normal preparation, planning, and lunch periods provided during the regular school year, on a weekly average.

6. A joint Conflict Resolution Committee, composed of four members shall be established to expedite the resolution of problems related to the emergency closing or programs and activities arising therefrom. The committee shall report at least weekly to the Superintendent and the President of the Columbus Education Association and shall operate under the rules for joint committees set forth in Article 508 of the CEA-Board Master Agreement.
COLUMBUS WILL HAVE "SCHOOL WITHOUT SCHOOLS"

Superintendent John Ellis today announced an unprecedented community-based plan to "keep learning alive" in Columbus and throughout central Ohio while schools are closed because of the fuel crisis. The plan will be launched on Monday, February 7.

Ellis said: "We're calling it 'School Without Schools' because that's exactly what we're going to do. We will have school in Columbus even though buildings served by natural gas are locked up tight. We've been flooded with offers of space and help from every conceivable source. We're going to have one of the greatest educational efforts this country has ever seen."

Dr. Ellis said the project will make use of mass media, school facilities that do not require natural gas, and community facilities which have been offered free of charge for the duration of the fuel crisis.

The Board of Education is expected to approve details of the plan on Tuesday. Changes in the school calendar will designate Wednesday, February 2 as an Emergency Planning Day for staff members. Students will attend regular classes on Thursday and Friday, February 3 and 4. School Without Schools will operate from February 7 through February 25, followed by a one-week "Spring Break," February 28 through March 4. Regular classes are scheduled to resume on March 7.

Ellis outlined the basic structure of the School Without Schools plan as follows:
The school district has about 30 buildings heated by fuel other than natural gas and each student will attend classes one day per week during the shut-down period. Students will turn in homework, pick up assignments and receive instructions for their weekly schedule on this day.

During the other four days of the week, students will participate in a variety of activities including classes in various non-school facilities throughout the community, field trips and home instruction via television, radio and newspapers. Teachers will maintain contact with students by telephone and personal conferences, as needed.

"Clearly, we have the most unusual opportunity any city has ever seen. During the next three weeks, an unbelievable array of activities and creative use of time, talent and community resources will keep learning alive in Columbus," the Superintendent said. "We are depending on parents to play an important role in this whole process, exercising good discipline at home to see that children participate in the activities and complete assignments."

Radio and TV lessons have been planned by school personnel and will be presented by Columbus teachers on WBNS-TV, WCBE-FM Radio and WBNS-AM Radio. Broadcast schedules will be printed in most area newspapers. WBNS-TV will air four hours of lessons daily, beginning at 7:30 a.m., Monday through Friday. WCBE-FM will broadcast six and one-half hours daily, beginning at 9 a.m. and WBNS-AM Radio will offer four hours of instruction each day, beginning at 10 a.m. Most other Columbus area broadcasters are providing free public service time to support the effort.

In addition to the media, Ellis described the following community resources that have been worked into the School Without Schools project:

- Columbus Mayor Tom Moody has offered city recreation centers and other

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(2/2/77)
municipal facilities throughout the city as places where teachers and counselors can meet pupils.

- Mel Dodge, director of the City Recreation and Parks Department, has developed a series of indoor and outdoor educational programs which can be taught jointly by City personnel and Columbus teachers. Examples of these courses are: First Aid, Everyday Mechanics, Gymnastics, Forestry, Ecology, Landscape Design and Introduction to Employment and the Job Market.

- The Center of Science and Industry will offer tours and instruction related to COSI exhibits.

- Battelle Memorial Institute has donated the use of its 600-seat auditorium, plus science lessons and demonstrations by its own staff scientists.

- The State Department of Education has developed a two-page newspaper "Classroom Extra" which will be printed daily in the Columbus Dispatch.

- Dean Frederick R. Cyphert of Ohio State's College of Education has volunteered to coordinate activities at OSU which would include guidance counseling tours and special programs.

Many other individuals and community agencies have offered assistance, Ellis said, including area churches, banks and theatres. Anyone wishing to make facilities or services available to the School Without Schools project should contact Lucien Wright, coordinator of project community facilities at 225-2842.

Some programs will continue uninterrupted during the shutdown period, Ellis said. These include:

- The school for crippled children housed in the electrically-heated addition to Colerain School.

- Adult High School classes, moving from Central High School to Mohawk Junior-Senior High School.
- The School of Practical Nursing.
- All CETA Programs.
- All off-campus special education programs and services, including those at Dodd-Means Hall, Florence Crittenton Home, Children's Hospital, Upham Hall, the St. Vincent Children's Center and the Juvenile Center.
- Athletic activities for boys and girls interscholastic teams are being re-scheduled into non-gas heated buildings.
- Some music and drama activities are being re-scheduled into other school and community theatre facilities.

Scheduling of students for the various field trips and community facilities will be booked by teachers through a central administration office. Transportation will also be coordinated through the central office.

"Each teacher will continue to be responsible for his or her pupils every day. Attendance will be taken at scheduled activities and grades will be assigned on the basis of work completed and handed in. Beyond that, we are taking a 'common sense' approach to education, relying on the ingenuity and creativity of our staff. The safety, health and welfare of students will be our primary consideration at all times," Ellis said.

"One of the most important lessons we teach is that people must continue to learn even after they leave school. This three-week period will provide an intensive program in helping to demonstrate that individual initiative and persistence are vital in getting a solid education," Ellis concluded.

-30-

2/1/77
GENERAL INSTRUCTIONS

DETTERIES

1. School mail deliveries will continue on a daily basis and will be made to the school office of the temporary location of each building principal. Materials and checks that must be delivered to custodial personnel or any others who continue to be assigned to the closed school must be made by the building principal.

2. U. S. Mail - Place a box marked U. S. Mail outside the normal mail delivery door each morning and instruct the custodian to bring it in after the mail has been delivered that day.

3. Deliveries of various supplies and equipment which have been purchased from outside vendors will continue to be delivered during this period. Place signs on the inside of all normal delivery doors instructing delivery drivers to come and knock at a door which the custodians can monitor with some reasonable frequency.

CUSTODIAL SHIFTS AND CLEANING ASSIGNMENTS

Until specific instructions are given to the contrary by Tom Barton or a custodial supervisor, custodians should maintain their present shift schedules. We will be making arrangements for weekend coverage in many schools by existing custodial staff and we will be making arrangements for the temporary reassignment of one custodian to all of the secondary schools which are going to remain open. Elementary schools which are going to remain open and need additional custodial help should make their request to Tom Barton. All of these reassignments and shift adjustments will be handled by Tom Barton and our custodial supervisors through direct contact as promptly as possible.

Head custodians in schools which are closed should assign specific cleaning tasks to the employees in the same manner as summer cleaning except that floors should be spray buffed rather than scrubbed and stripped. However, the first priority is to assist with monitoring heating problems and temperatures in the building and assisting in closing up the building as tightly as possible.

Let's get boiler rooms and fan rooms cleaned up during this period. Call Ed Molter for a pick-up on broken furniture and trash that cannot be handled with our normal trash collection companies.

SECURING THE BUILDING AND OPERATION OF THE HEATING PLANT IN CLOSED BUILDINGS

Engineering Services personnel and Maintenance Department personnel will assist the head custodian at each building in reducing temperatures to the degree possible without causing damage and freeze-ups. There will be ten teams of these personnel assigned to groups of schools. They will visit your building as promptly as possible to provide whatever assistance is needed. Until they arrive, building temperatures should continue to be reduced in the same manner as in recent weeks. There are some items which can be proceeded with this Friday, February 4.

1. Leave all classroom doors unlocked and open except for the room where audio-visual equipment is stored. This must include kitchen and shop areas. (advise your Food Service Manager of this). This instruction is essential because our maintenance people cannot get into some areas when they are locked and the head custodian does not have a key.
GENERAL INSTRUCTIONS (continued)

2. Take all covers off of unit heaters and leave them open.

3. All schools with service tunnels should have all of the lights left on and the access doors open. Tunnels should be checked daily for problems. Burned out light bulbs should be replaced promptly in these tunnels.

4. Lights in all classrooms should be left off except as needed.

5. A thermometer should be monitored in the oldest classroom in the building.

6. Close all outside air vents and exhaust grills or cover them if they can't be closed.

7. Pull all window shades at the close of school on Friday, February 4.

CUSTODIAL ABSENCE REPORTING

Custodial absence reporting should be handled in the same manner as it is presently handled. In order to do this principals will need to know from their head custodian when a custodian is absent from duty.

TRASH COLLECTION SCHEDULE

Schools which are in operation will have trash collection at least as often as their present schedule and may get additional pick-ups by calling 225-2610. Schools which are closed will have one trash collection during the week of February 7 and one trash collection during the week of February 28.

USE OF BUILDING CONTRACTS

All use of building contracts have been cancelled for the duration of the emergency period effective at the close of business Friday, February 4, 1977.

MAJOR CONTACT PERSONNEL

All custodial assignment questions and all clerical assignment questions should be directed to Tom Barton at 225-2603.

All requests for supplies and equipment and the relocation of all equipment and furniture should be directed to Bill Cooke at 225-2820.

All heating problems should be reported promptly in the following manner:

Day time - 225-2642 or 225-2643
Night calls should go to Floyd Mash - 279-1126
Larry Hozingo - 263-9174
Clarence Lewis - 891-1939
Charles Randolph - 491-6363
### MAIL DELIVERY LOCATIONS

#### BUSINESS AFFAIRS

**Columbus Public School Facilities**

*Which Will Be Open During The Energy Crisis*

**February, 1977**

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<thead>
<tr>
<th>Secondary</th>
<th>Elementary and Special</th>
<th>Other</th>
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<tbody>
<tr>
<td>Beechcroft</td>
<td>Beck</td>
<td>52 Starling</td>
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<tr>
<td>Briggs</td>
<td>Clinton</td>
<td>Southeast Career</td>
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<tr>
<td>Centennial</td>
<td>Colerain</td>
<td>Fort Hayes Career (New Buildings)</td>
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<td>East</td>
<td>Como</td>
<td>Adult Health Career</td>
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<tr>
<td>Independence</td>
<td>Deshler</td>
<td>Marathon Station</td>
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<td>Linden McKinley</td>
<td>East Linden</td>
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<td>Mohawk</td>
<td>Fifth</td>
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<td>North</td>
<td>Gables</td>
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<td>Northland</td>
<td>Hamilton</td>
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<td>West</td>
<td>Innis</td>
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<td>Crestview Jr.</td>
<td>Kingswood</td>
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<td>Everett Jr.</td>
<td>Liberty</td>
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<td>Indianola Jr.</td>
<td>Lincoln Park</td>
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<td>Roosevelt Jr.</td>
<td>Linden Park</td>
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<td>Oakland Park</td>
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<td>Shady Lane</td>
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<td>South Mifflin</td>
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<td>Sullivant</td>
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<td></td>
<td>West Broad</td>
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<td></td>
<td>West Mound</td>
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</table>

*These facilities will be open but do not have instructional programs*

- 270 East State Street
- 46 Starling Street
- Seventeenth Avenue Complex
- Fort Hayes Transportation Office
- Smith Road Transportation Office
- Food Production Center
- Non-school district operated mail delivery locations
- St. Vincents / Juvenile Center (Tuesday and Friday)
- O.S.W. Upham Hall
- Florence Crittenden Home
- COSI (Tuesday and Friday)
- First Avenue School
INSTRUCTIONS FOR EMERGENCY MOTHBALLING OF BUILDINGS

While it is unlikely, it is possible that a loss of gas pressure at one or more buildings could occur during this period. In the event gas for all schools had to be shut off, announcements to this effect would be placed on radio and television. In case of such an announcement all head custodians and all custodial personnel should report immediately to their building.

If loss of gas pressure in an individual school results in a shut down of heating, the head custodian should immediately contact the emergency numbers for Engineering Services and proceed as directed. If there is a school-wide shut down of gas announced in the media, the custodial personnel should take the actions listed below as soon as they arrive at the building. Engineering Services personnel and others will be going from building to building during such a time to provide all the assistance possible. (Do 1 before 2, etc.).

1. Shut off the water at the meter.
2. Open all faucets in bathrooms, kitchen areas, etc.
3. Flush all commodes as soon as water quits running out of faucets.
4. Shut off gas valve to all boilers and hot water heaters, ranges, and any gas appliances.
5. Shut down all circulating pumps.
6. Open blowoff line on boiler to begin draining boiler.
7. Go to each unit heater or radiator and open all bleeder valves.
8. Open faucet and drain hot water tank.
9. Shut off air compressor and shut off all fans.
10. Make sure sump pump is operating.
11. Begin to put anti-freeze in all commodes, urinals, lavatories and floor drains and sinks.

The following amounts should be used being sure to use some judgment where there are abnormally large traps or drains:

a. Urinals, lavatories, sinks -- 1 pint
b. Bradley sinks, floor drains -- 1 quart
c. Commodes -- ½ quarts

Note: The commode tank should be almost empty because you flushed it after the water had drained out of the lines. After the above instructions have been completed, go back and sponge out the remaining water from the commode tanks.

If you have special problems during any of this process, contact Floyd-Mash at 225-2642 or 225-2643. If you have electrical problems with your sump pump call the Maintenance Department at 294-6317.
## RADIO-TV PROGRAM INFORMATION

(During Energy Crisis)

(See program logs in Part E and Part F of this handbook.)

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<th>Program</th>
<th>Contact Person</th>
<th>Telephone</th>
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<tbody>
<tr>
<td>WBNS-TV</td>
<td>Beginning Reading</td>
<td>Nancy Zook</td>
<td>464-4591</td>
</tr>
<tr>
<td></td>
<td>Lions</td>
<td></td>
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<td>Tigers</td>
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<td>Dinosaurs</td>
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<td></td>
<td>Reading - Rainbows</td>
<td>Mary Wheaton</td>
<td>464-4591</td>
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<td></td>
<td>Reading - Signposts</td>
<td>Norma Sexton</td>
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<td>Reading - Secrets</td>
<td>Louella Tapo</td>
<td>464-4591</td>
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<td>Reading - Rewards</td>
<td>John Matchett</td>
<td>464-4591</td>
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<td>Reading - Panorama and Fiesta</td>
<td>Mary Lou Casanta</td>
<td>464-4591</td>
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<td>Reading - Kaleidoscope</td>
<td>Brenda Conard</td>
<td>464-4591</td>
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<td></td>
<td>Images</td>
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<td>Galaxies</td>
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<td></td>
<td>Special Education - Elementary</td>
<td>Kay Teagardner</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Fine and Performing Arts - All Students</td>
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<tr>
<td></td>
<td>Ensemble</td>
<td>Jerry McAfee</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Vocal</td>
<td>Bunny Shontz</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Wind Instrument</td>
<td>Clarence McBroom</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Vocal (Interval)</td>
<td>Jim McDodd</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Instrumental Music - Improvisation</td>
<td>Tom Dale</td>
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<tr>
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<td>Instrumental Music - Strings</td>
<td>Ted Pollock</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Multi Arts</td>
<td>Hank Russell</td>
<td>225-2845</td>
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<tr>
<td></td>
<td>Junior High Grammar and Composition</td>
<td>Elizabeth Pettit</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>General Science and Algebra</td>
<td>Otho Perkins</td>
<td>225-2669</td>
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<tr>
<td></td>
<td>General Math for Secondary Students</td>
<td>Earl Tharp</td>
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<tr>
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<td>American History and Government</td>
<td>Gladys Wagstaff</td>
<td>464-4591</td>
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<td></td>
<td>Senior High Grammar and Composition</td>
<td>Kathy Parks</td>
<td>464-4593</td>
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<td>World History for Secondary Students</td>
<td>John Grossman</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Biology and Geometry</td>
<td>Otho Perkins</td>
<td>225-2669</td>
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</tbody>
</table>

| WBNS-AM RADIO | Fine and Performing Arts - All Students | Jim Gallagher | 464-4591 |
|               | Playing By Ear                               | Richard Early    | 464-4591 |
|               | Instrumental Music - Jazz                   | Jerry McAfe       | 464-4591 |
|               | The Arts and You                             | Phil Arena       | 464-4591 |
|               | Principles of Democracy                      | Charlene Gamble   | 464-4591 |
|               | Ohio History, Government and Geography      | Diana Galbreath   | 464-4591 |
|               | World Geography for Secondary Students       | Ray Pauken        | 464-4591 |
|               |                                               | Herb James        | 464-4591 |

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<table>
<thead>
<tr>
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<th>Contact Person</th>
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<tbody>
<tr>
<td>WBNS-AM RADIO</td>
<td>Junior High Grammar, Vocabulary and Literature</td>
<td>Sharon Dorsey</td>
<td>464-4591</td>
</tr>
<tr>
<td></td>
<td>German</td>
<td>Helma English</td>
<td>864-6050</td>
</tr>
<tr>
<td></td>
<td>French</td>
<td>Diane Ging</td>
<td>876-1772</td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>Charles Vedder</td>
<td>457-2212</td>
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<td></td>
<td>Current Issues for Secondary Students'</td>
<td>Jack Readey</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Senior High Grammar and Usage</td>
<td>Paul Wiess</td>
<td>464-4591</td>
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<td>Senior High Literature</td>
<td>Barbara O' Connor</td>
<td>464-4591</td>
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<tr>
<td>WCBE-FM RADIO</td>
<td>Language Arts and Math K - 1st Grade.</td>
<td>Ruth Murray</td>
<td>464-4591</td>
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<tr>
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<td>Language Arts and Math 2nd Grade</td>
<td>Martha Dorsey</td>
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<td>Language Arts and Math 3rd Grade</td>
<td>George Goodrich</td>
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<td>Language Arts and Math 4th Grade</td>
<td>Alberta Myers</td>
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<td>Language Arts and Math 5th Grade</td>
<td>Ruth Hale</td>
<td>464-4591</td>
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<tr>
<td></td>
<td>Language Arts and Math 6th Grade</td>
<td>Charles Kellar</td>
<td>464-4591</td>
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</tbody>
</table>
Beginning Reading - *Tigers, Lions and Dinosaurs*

**WBNS-TV**  
7:30 a.m.  
M-F

The Beginning Reading TV Show will include selected readings for children from the books *Tigers*, *Lions*, and *Dinosaurs*. Emphasis will be on comprehension and vocabulary. Decoding skills, particularly consonant sounds, will be stressed daily. Good literature and enrichment activities will be included and children will be encouraged to continue independent reading at home.

Reading - *Rainbows*

**WBNS-TV**  
7:45 a.m.  
M-F

The program will focus on reading for meaning. Emphasis will be on the development of various comprehension skills such as literal comprehension, sequence, and following directions. Vocabulary specific to *Rainbows* as well as new words pertinent to the reading selections will be developed. Decoding skills relating to letter-sound associations, particularly clusters, will be stressed. Good stories and poems will be shared daily. Children will be encouraged to continue suggested reading and extension activities.

Reading -- "Signposts"

**WBNS-TV**  
8:00 a.m.  
M-F

This program consists of stories presented through storytelling, and visuals to which the child can respond. These stories will serve as the basis for general skill instruction. The major comprehension focuses will be reading to follow directions, reading to note correct sequence, reading to note detail, and reading to understand sentence structure. Also included will be skill instruction in vowel sounds (decoding skills) and extension activities in literature.

Reading -- *SECRETS*

**WBNS-TV**  
8:15 a.m.  
M-F

The program consists of stories, poems, skill instruction, vocabulary study and extension activities at a level appropriate for children reading in *Secrets*. Skill instruction will focus on: consonants, clusters, prefixes, suffixes, compound words, punctuation, and using context to determine meaning of unfamiliar words. The students will also have opportunity to read along as reading selections are shown on the screen.
Reading "Rewards"

WBNS-TV

8:30 a.m. M-F

The following stories will be used to present children with literature and the printed word: Just Like Abraham Lincoln, Saturday Surprise, Mr. Picklepaw's Popcorn, and Hawaii. Poetry selections will also be used. The skills to be covered include: compound words, figurative speech, true-to-life and fanciful; setting of stories, punctuation (commas).

Reading "Panorama" and "Fiesta"

WBNS-TV

8:45 a.m. M-F

The theme of this program will be "Movin' On" (transportation). This will introduce stories, poems, literature, word skills (structural analysis, affixes, compound words), comprehension (using dictionary to get word meanings and context of sentence to figure out meanings of words). This material will be taken from the basal readers creative activity sections. Materials from home will be used for follow-up lessons.

Reading--"Kaleidoscope" "Images" "Galaxies"

WBNS-TV

9:00 a.m. M-F

This program will introduce and present stories or other short selections. A purpose will be established for reading or listening and stress comprehension or vocabulary development. Specific skill areas to be covered will be: study skills, literary skills and structural analysis. Follow up activities will be suggested near the conclusion of each program.

Special Education for Basic Living

WBNS-TV

9:15 a.m. M-F

The Basic Living Skills program will include safety in the home, telling time, fire safety, counting change, using the telephone, language concepts related to season (winter, Valentine's Day), listening comprehension and eating out (manners, ordering). Content will focus on the elementary age group but will provide a range of activities to reinforce concepts for secondary students as well.

34"
Fine & Performing Arts - Multi-Arts--(K-6)

WBNS-TV  
9:30 a.m.  
M, 2/7/77

Activities in dance, drama, music, and visual art. Presented by teachers from the Calumet/Cassady and Sharon/West Mound IMPACT teams.

Fine & Performing Arts - Multi-Arts--(K-6)

WBNS-TV  
9:30 a.m.  
M, 2/14/77

Activities in dance, drama, music, and visual art. Presented by teachers from the Cranbrook/Eastgate and Douglas/Marburn IMPACT teams.

Fine & Performing Arts - Multi-Arts--(K-6)

WBNS-TV  
9:30 a.m.  
M, 2/21/77

Activities in dance, drama, music, and visual art. Presented by teachers from the Indianola/Kingswood and Pinecrest/Watkins IMPACT teams.

Fine & Performing Arts - The Visual Arts--(7-12)

WBNS-TV  
9:30 a.m.  
Tues., 2/8/77

Conversations about Painting - a discussion with Roman Johnson, well-known Columbus painter.

Fine & Performing Arts - The Visual Arts--(7-12)

WBNS-TV  
9:30 a.m.  
Tues., 2/14/77

Conversation about Sculpture - a discussion with Marilyn Reeves, prize-winning Columbus sculptor.

Fine & Performing Arts - The Visual Arts--(7-12)

WBNS-TV  
9:30 a.m.  
Tues., 2/22/77

Conversation about Architecture - A discussion with Bruce Grulke, environmental-designer-in-residence at Marion-Franklin High School.
On February 9, a studio group of eight Columbus Public School instrumental music students will be used to demonstrate the various aspects of beginning a tone on a wind instrument.

On February 16, a studio group of eight Columbus Public School instrumental music students will be used to demonstrate the various aspects of releasing a tone on a wind instrument.

On February 23, a small jazz combo will present a demonstration and explanation of an approach to jazz improvisation.

This program is an introduction to music reading utilizing the interval approach. Beginning with the scale, the space or internal relationships that appear in all music will be explored. Without regard to clefs or keys, the intervals will be defined through syllables and familiar songs.

The intervals are reviewed, then identified by the viewer of the intervals as shown on the screen. The intervals are flashed on the screen for a short time—students will be asked to write down the name of the interval. The interval is shown again and students asked to score their answer.

Interval recognition will be continued at a faster flashed speed.

On February 11 and 18, the program will include tuning, warm-up exercises to establish basic platform, note reading, identification of whole-steps and half-steps, scale building, rhythm and bowing exercises on string instruments.
Fine and Performing Arts - Instrumental Music -- "Ensembles -- A Start to Musicianship"

WBNS-TV

9:30 a.m. Friday

On February 25 the program will deal with the attainment of music fundamentals and musicianship by the means of instrumental music ensembles at the secondary level. The production will explore music reading, rehearsal problems, interpretation, and ensemble discipline through the use of live ensembles.

Junior High Grammar/Composition

WBNS-TV

9:45 a.m. M-F

The program will provide learning activities built around three broad topics: Features, Sensory Awareness, and Sharing Student Writing. These areas will have the following content: Features: 1) Famous quote of the day, 2) Writing hint of the day, 3) Word of the day, 4) Synonyms (Thesaurus), 5) Sentence combining and 6) Parts of speech. Sensory Awareness will help students learn the techniques of observing by "describing" through poetry, dialogue, reporting, and characterization.

Science - Secondary -- Science 9

WBNS-TV

10:00 a.m. M-W-F 1st week T-Th 2nd week

The lessons will explore various concepts and processes important to Grade 9 science. Topics such as matter, energy, density, measurement, and so forth will be investigated. Each lesson will emphasize a different aspect of Grade 9 science.

Algebra - Secondary

WBNS-TV

10:00 a.m. T & Th. 1st week
10:00 a.m. M-W-F 2nd week

The programs will cover the major topics of graphing, relations and functions. Emphasis will be placed on plotting points, relations and functions, linear functions, polynomial functions, slope - intercept form of a linear function, parallel lines and slope, and intersection of functions. Appropriate assignments will be made from the textbooks "Discovering Algebra I" and "Discovering Algebra II" by Jacobs. Students will need notebook paper, graph paper and a straight edge.
General Math - Secondary

WBNS-TV 10:15 a.m. M-F

The topics will concern contemporary mathematics in general. They will coordinate matters of current interest with computational exercises. Topics to be covered include: metric measuremelt; probability, number theories, computational short cuts, using a calculator, informal geometry, mathematics and ecological concerns.

American History and Government for Secondary Students

WBNS-TV 10:30 a.m. M-F

The chronological development of "basic" American history will be emphasized and will be programmed to meet the needs of both 8th and 11th grade students. The following is a topic outline:

1st week
- 2-7 Monday Reconstruction
- 2-8 Tuesday Economics of the South
- 2-9 Wednesday Governmental Legislation
- 2-10 Thursday The South's Reaction
- 2-11 Friday Character Sketches

2nd week
- 2-14 Monday Rise of Industry
- 2-15 Tuesday Circumstances that caused the Industrial Boom
- 2-16 Wednesday Immigration
- 2-17 Thursday Inventions/Inventors/Impact on Society
- 2-18 Friday Character sketch of an Industrialist

3rd week
- 2-21 Monday Westward Movement
- 2-22 Tuesday American Indians
- 2-23 Wednesday The American Indians and Conflict
- 2-24 Thursday Manifest Destiny
- 2-25 Friday Manifest Destiny

English Composition for Senior High Students--Writing - Structural Composition

WBNS-TV 10:45 a.m. M-F

These 15 lessons are designed to give students the basic tools for writing. It will teach them how to find an interesting, appropriate topic and how to present that topic on paper.
World History - Secondary Students

A format using "The Time Machine" theme will be used to trace world history. The first week will include: 1) Sentinels of Silence - Mexico; 2) Lost Kingdoms - West Africa; 3) Merchant Prince - Venice; 4) Family Feud - China; 5) Heavens to Galileo. The second week will include: 1) The Cultural Collision - Turkey; 2) The Iron Man - Germany; 3) Window on the West - Soviet Union; 4) Birth of a Dram - East Africa; 5) Philip's Obsession - Spain. The third week will include: 1) On First Impression - France; 2) Canadian George - Canada; 3) Passage Thru Paradise - Pakistan; 4) The Black-Napoleon - Haiti; 5) Timeless People - Philippines.

Math - Secondary

The geometry lessons will be taught in conjunction with the text, Modern Geometry by Doleiani. The first four lessons will cover the constructions in Ch. 10. Specifically: Constructions 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12. The next four lessons will cover some coordinate geometry sections in Ch. 11. Specifically: 11-5, 11-6, 11-7, 11-8.

Science - Secondary - Biology - Life Science

The cell is the basic unit of life, and is of major emphasis in Grade 10 Biology. The lessons will explore the cell, its structure and processes. Each lesson will emphasize a different cell function or characteristic.
English - Senior High--Grammar/Usage

WBNS-Radio 1:15 p.m. M-F

The learning activities will concentrate on the problems of language and communication. The emphasis will be on usage, vocabulary, and diction. Assignments will utilize dictionaries and newspapers and will require paragraph writing. Students will be asked to keep a folder of assignments.

English - Junior High Grammar, Vocabulary and Literature

WBNS-Radio 11:00 a.m. M-F

The learning activities will concentrate on the development of basic language skills, vocabulary and literature appreciation. Program content will include basic language skills, i.e., mechanics, usage and sentence structure. The program topics will cover listening skills, word associations, figures of speech, the short story, open-ended stories, humor, newspaper, character sketches, sensory writing and other related content.

Current Issues for Secondary Students

WBNS-Radio 1:15 p.m. M-F

The current American and world scene will be analyzed through topic presentations by guest experts who will also field questions called in by students. Topics include The Right to Die, Plea Bargaining, The Energy Crisis and Health Care. Two days will be devoted to each topic with the presentation by the guest expert on the first day and responses to questions from students on the second day.

English - Senior High--Literature

WBNS-Radio 1:45 p.m. M-F

This senior high radio English course is designed to trace the progression of literature from the oral tradition to the structure of the 20th century short story. Included in this progression will be mythology, legends, poetry and short stories.
THE NOW MUSIC -- From where did it come? A capsule survey of the development of jazz into the Rock Era. The program will begin with dixieland jazz in the early 1900's and trace the development of jazz through the 20's, 30's, 40's, 50's and its influence upon the 1960's and 70's. The program will be aimed at the secondary level student.

"The Now Music--From Where Did It Come?" On February 7 and 14 a capsule survey of the development of jazz into the Rock Era will be presented. The program will begin with dixieland jazz in the early 1900's and trace the development of jazz through the 20's, 30's, 40's, 50's and its influence upon the 1960's and 70's. The program will be aimed at the secondary level student.

On February 21 the program will stress the importance of careful listening and learning to play by ear. There will be musical examples as played by professionals, an opportunity for listening to and play back a melodic line. Advice will be given on further work the student can do at home.

On February 9 Mr. George Massiey will present a live performance on a folk approach as a preview to the Opera Figaro. The opera will be presented on February 17, 10:00 a.m., at the Chio Theater.

On February 16 the topic deals with environmental sounds as they are employed by composers to become organized sound--MUSIC.

On February 23 the lesson will explore ways composers organize familiar scenes and sounds of the environment into musical compositions.
Ohio History, Government and Geography - Secondary Students

WBNS-Radio 10:30 a.m. M-F

This program will present the chronological development of Ohio beginning with the Civil War period. The history, government and geography will be woven together and the basics will be emphasized. The fifteen programs will consist of stories dealing with individuals who helped shape Ohio's history and government and interviews with government, industrial and civic leaders.

Principles of Democracy - Secondary Students

WBNS-Radio 10:15 a.m. M-F

The learning activities will analyze key concepts of American democracy. Emphasis will be on the basic concepts of government. The topics in order of presentation are: a pro and con discussion of President Carter's amnesty program, student rights and responsibilities, the effects of broken homes on family members and wise use of consumer credit.

World Geography for Secondary Students

WBNS-Radio 10:45 a.m. M-F

The basic concepts of geography, such as culture, climate, map and globe skills, etc. will be emphasized. Topics will be weather, weather measurement, man vs. weather, present fuel usage, and future fuels.
Radio - WCBE-FM

It is suggested that principals duplicate these materials for their teachers.

Language Arts and Math, Kindergarten and First Grade

WCBE-FM   9:00 a.m., Repeat at 12:30 p.m.   M-F

The program will include the following areas of study:
Language Arts - Listening skills, stories, poems, riddles, rhyming words, contractions, compound words, sounds and similar activities.
Mathematics - Counting, sequencing, sizes, shapes, fractions, time, number facts and similar activities.
Science - Weather, animals and similar interests.

Social Studies - February Holidays and Black History Week.

Language Arts and Math, Third Grade

WCBE-FM   10:00 a.m. Repeat at 1:30 p.m.   M-F

The programs will include the following:
Language Arts - Expanding and extending vocabulary through use of textbooks, poems, games, and music.
Mathematics - Addition, subtraction, multiplication, and introduction of division.
Social Studies - Stimulating student interest in observation of his/her immediate environment.

Language Arts and Math, Second Grade

WCBE-FM   9:30 a.m. Repeat at 1:00 p.m.   M-F

The programs will cover the following areas:
Mathematics - Addition, subtraction, two-digit problems, shapes, sizes, sequencing of numbers, measurements, time, and story problems.
Spelling - Unit 19, page 64, the first week activities to be completed during the week with a test on Friday; dictionary skill, sentences, rhyming, alphabetizing, and creative writing. Units 20 and 21 during the second and third weeks.

Language Arts and Math, Fourth Grade

WCBE-FM   10:30 a.m. Repeat at 2:00 p.m.   M-F

The programs will offer the following:
Mathematics - Reviewing basic facts and concepts of multiplication, definition of terms, and steps necessary for problem solving.
Spelling - Units 19, 20, and 21 as a base, following concepts presented in the units.
Language Arts and Math  Fifth Grade

WCBE-FM  11:00 a.m. Repeat at 2:30 p.m.  M-F

The programs will include the following: Language Arts - Using attention getters in the areas of mathematics and science to initiate language arts activities. An integrated approach will be used to help students understand the relationship between language arts and other subjects. Mathematics - Activities will include exercises involving addition, subtraction, multiplication, division, and problem solving exercises requiring sophisticated approaches.

Language Arts and Math  Sixth Grade

WCBE-FM  11:30 a.m. Repeat at 3:00 p.m.  M-F

The program content will consist of a review of basic facts. A high degree of interest material will be offered after the review exercises.
SCHOOL WITHOUT SCHOOLS

Elementary Subject Areas Offered On Radio And Television

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<thead>
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<th>Subject</th>
<th>Station or Channel</th>
<th>Time</th>
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<tr>
<td>Fine &amp; Performing Arts</td>
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<tr>
<td>Fine &amp; Performing Arts</td>
<td>WBNS-AM 1460</td>
<td>10:00 a.m.</td>
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<tr>
<td>*Fine &amp; Performing Arts IMPACT</td>
<td>WTVN-TV Channel 6</td>
<td>10:30 a.m.</td>
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<tr>
<td>Language Arts - K-First Grade</td>
<td>WCBE-FM 90.5</td>
<td>9:00 a.m. &amp; 12:30 p.m.</td>
</tr>
<tr>
<td>Language Arts - Second Grade</td>
<td>WCBE-FM 90.5</td>
<td>9:30 a.m. &amp; 1:00 p.m.</td>
</tr>
<tr>
<td>Language Arts - Third Grade</td>
<td>WCBE-FM 90.5</td>
<td>10:00 a.m. &amp; 1:30 p.m.</td>
</tr>
<tr>
<td>Language Arts - Fourth Grade</td>
<td>WCBE-FM 90.5</td>
<td>10:30 a.m. &amp; 2:00 p.m.</td>
</tr>
<tr>
<td>Language Arts - Fifth Grade</td>
<td>WCBE-FM 90.5</td>
<td>11:00 a.m. &amp; 2:30 p.m.</td>
</tr>
<tr>
<td>Language Arts - Sixth Grade</td>
<td>WCBE-FM 90.5</td>
<td>11:30 a.m. &amp; 3:00 p.m.</td>
</tr>
<tr>
<td>*Literature - Fourth, Fifth, Sixth</td>
<td>WTVN-TV Channel 6</td>
<td>11:00 a.m.</td>
</tr>
<tr>
<td>Mathematics - K-First Grade</td>
<td>WCBE-FM 90.5</td>
<td>9:00 a.m. &amp; 12:30 p.m.</td>
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<tr>
<td>Mathematics - Second Grade</td>
<td>WCBE-FM 90.5</td>
<td>9:30 a.m. &amp; 1:00 p.m.</td>
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<td>Mathematics - Third Grade</td>
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<tr>
<td>Mathematics - Sixth Grade</td>
<td>WCBE-FM 90.5</td>
<td>11:30 a.m. &amp; 3:00 p.m.</td>
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<tr>
<td>*Mathematics - Primary &amp; Intermediate</td>
<td>WCMH-TV Channel 4</td>
<td>11:15 a.m.</td>
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<tr>
<td>Reading- Tiger, Lions, Dinosaurs</td>
<td>WBNS-TV Channel 10</td>
<td>7:30 a.m.</td>
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<td>Reading- Rainbows</td>
<td>WBNS-TV Channel 10</td>
<td>7:45 a.m.</td>
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<td>Reading- Signposts</td>
<td>WBNS-TV Channel 10</td>
<td>8:00 a.m.</td>
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<tr>
<td>Reading- Secrets</td>
<td>WBNS-TV Channel 10</td>
<td>8:15 a.m.</td>
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<tr>
<td>Reading- Rewards</td>
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<tr>
<td>Reading- Panorama</td>
<td>WBNS-TV Channel 10</td>
<td>8:45 a.m.</td>
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<tr>
<td>Reading- Fiesta</td>
<td>WBNS-TV Channel 10</td>
<td>8:45 a.m.</td>
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<tr>
<td>Reading- Kaleidoscope</td>
<td>WBNS-TV Channel 10</td>
<td>9:00 a.m.</td>
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<tr>
<td>Reading- Images</td>
<td>WBNS-TV Channel 10</td>
<td>9:00 a.m.</td>
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<tr>
<td>Reading- Galaxies</td>
<td>WBNS-TV Channel 10</td>
<td>9:00 a.m.</td>
</tr>
<tr>
<td>*Science- Primary &amp; Intermediate</td>
<td>WCMH-TV Channel 4</td>
<td>11:00 a.m.</td>
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<tr>
<td>Social Studies - K-First Grade</td>
<td>WCBE-FM 90.5</td>
<td>9:00 a.m. &amp; 12:30 p.m.</td>
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<tr>
<td>Social Studies - Second Grade</td>
<td>WCBE-FM 90.5</td>
<td>9:30 a.m. &amp; 1:00 p.m.</td>
</tr>
<tr>
<td>Social Studies - Third Grade</td>
<td>WCBE-FM 90.5</td>
<td>10:00 a.m. &amp; 1:30 p.m.</td>
</tr>
<tr>
<td>Social Studies - Fourth Grade</td>
<td>WCBE-FM 90.5</td>
<td>10:30 a.m. &amp; 2:00 p.m.</td>
</tr>
<tr>
<td>Social Studies - Fifth Grade</td>
<td>WCBE-FM 90.5</td>
<td>11:00 a.m. &amp; 2:30 p.m.</td>
</tr>
<tr>
<td>Social Studies - Sixth Grade</td>
<td>WCBE-FM 90.5</td>
<td>11:30 a.m. &amp; 3:00 p.m.</td>
</tr>
<tr>
<td>Special Education for Basic Living Skills</td>
<td>WBNS-TV Channel 10</td>
<td>9:15 a.m.</td>
</tr>
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</table>

*Programs offered on WCMH-TV and WTVN-TV are scheduled tentatively to begin on February 14.

(2/9/77)
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### Secondary Subject Areas Offered on Radio and Television

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<th>Station or Channel</th>
<th>Time</th>
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<td>Current Issues</td>
<td>WBNS-AM 1460</td>
<td>1:00 p.m.</td>
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<tr>
<td>English</td>
<td>WBNS-TV Channel 10</td>
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<tr>
<td>Junior High Grammar and Composition</td>
<td>WBNS-AM 1460</td>
<td>11:00 a.m.</td>
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<td>Junior High Grammar, Vocabulary, Literature</td>
<td>WBNS-AM 1460</td>
<td>10:45 a.m.</td>
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<td>Senior High Grammar and Composition</td>
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<td>Senior High Grammar and Usage</td>
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<td>1:45 p.m.</td>
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<td>Fine and Performing Arts</td>
<td>WBNS-AM 1460</td>
<td>10:00 a.m.</td>
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<td>Fine and Performing Arts * Secondary Arts 7-12</td>
<td>WTVN-TV Channel 6</td>
<td>10:30 a.m.</td>
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<td>Foreign Language</td>
<td>WBNS-AM 1460</td>
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<td>German</td>
<td>WBNS-AM 1460</td>
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<td>French</td>
<td>WBNS-AM 1460</td>
<td>12:30 p.m.</td>
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<td>Spanish</td>
<td>WBNS-AM 1460</td>
<td>1:45 p.m.</td>
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<td>Government, History and Geography</td>
<td>WBNS-AM 1460</td>
<td>10:30 a.m.</td>
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<td>American History and Geography</td>
<td>WBNS-AM 1460</td>
<td>10:30 a.m.</td>
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<tr>
<td>Ohio History, Government &amp; Geography</td>
<td>WBNS-AM 1460</td>
<td>10:15 a.m.</td>
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<tr>
<td>Principles of Democracy</td>
<td>WBNS-AM 1460</td>
<td>10:45 a.m.</td>
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<td>World Geography</td>
<td>WBNS-AM 1460</td>
<td>11:00 a.m.</td>
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<tr>
<td>World History</td>
<td>WTVN-TV Channel 6</td>
<td>9:00 a.m.</td>
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<td>Mathematics</td>
<td>WBNS-TV Channel 10</td>
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<td>Algebra</td>
<td>WBNS-TV Channel 10</td>
<td>10:15 a.m.</td>
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<td>General Math</td>
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<td>Geometry</td>
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<td>Mathematics for 7th and 8th</td>
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<td>Science</td>
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<td>Biology</td>
<td>WBNS-TV Channel 10</td>
<td>10:00 a.m.</td>
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<td>General Science</td>
<td>WTVN-TV Channel 6</td>
<td>11:30 a.m.</td>
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<tr>
<td>Vocational Ed/Career &amp; Practical Education</td>
<td>WCHM-TV Channel 4</td>
<td>11:30 a.m.</td>
</tr>
</tbody>
</table>

*These are the programs where a change has been made.
SOME EXPECTATIONS

1. Pupils and teachers are expected to have at least one day "in-school" together each week between February 7 and 25.

2. Teachers are expected to arrange for as many additional activities involving pupils as possible, including lessons in the media, visits to community facilities, and such activities as they are able to create.

3. Pupils are expected to participate in all scheduled School Without Schools activities, and parents are expected to help see that they do.

4. All school personnel are expected to use maximum creativity in making assignments and maintaining contacts with pupils.

5. Throughout the School Without Schools project, school personnel are expected to help pupils and parents be fully informed about:
   - The Columbus Public Schools building their school is assigned to use one day per week.
   - The bus schedule for the "in-school" day.
   - Lesson assignments.
   - Learning opportunities available through television, radio, the newspapers, and community facilities.
   - How teachers and pupils can stay in touch with one another.

Note: The expectations listed above also apply to situations in which a school will have its "in-school" day in a community facility.

6. Pupils are expected to be present when their school is scheduled for its "in-school" day. Normal excuses for absence will be accepted.

7. Teachers are expected to determine whom to call in case of an emergency while a pupil is in school or participating in a School Without Schools activity.

8. Pupils are expected to take textbooks home, as instructed by their teachers.

9. Pupils are expected to complete assignments made by their teachers during the School Without Schools project.
10. Teachers are expected to take attendance at all scheduled School Without Schools activities.

11. Teachers are expected to record grades on the performance of pupils on assignments made and tests given during the project.

12. Teachers are expected to keep themselves available for professional assignments as needed.
TRANSPORTATION GUIDELINES

General Information

Contract Services

All contract operators have been asked to operate their routes (both Parent Pay and Board Pay) on a regular basis when the school is in session. Children will be delivered to and picked up from the alternate school site.

Loading and Supervision

Buses will be on site 15 minutes prior to the scheduled departure time at the Home School. Buses are to be loaded one at a time with the lead bus being loaded first until full. As soon as a bus is full, it will leave for the alternate school site, discharge the children, and return to home school with possible second load trip.

Principals should see that a staff member is assigned to the loading site to assist with the management and loading of pupils.

Neighborhood Routes

Where neighborhood routes are normally transported to a Home School, those routes will operate and will transport the students to the alternate school site. An attempt will be made to operate those routes as close to schedule as possible for morning pick up. All afternoon take home trips will need to be adjusted according to the revised school day schedule.

Columbus Plan

Secondary Columbus Plan will operate on a regular schedule Monday through Thursday for children whose schools are in operation. Routes will operate only for morning and afternoon schedules. There will be no noon or half-day Columbus Plan routes.

Fort Hayes Career Center and Southeast Career Center will operate Fridays only and will maintain their normal schedule.

All Columbus Plan elementary routes will operate on Fridays only. Routes will be run on the regular schedules and in the regular pattern and students will be delivered to the alternate school sites. Any Columbus Plan school not in session on Friday will not have transportation for the duration of this plan with the exception of Innis which will receive one trip.
Elementary Schedule

For schools whose children will be delivered from a Home School to an alternate school the following schedule will be in effect.

9:00  Buses leave Home School
11:30 Buses leave alternate site with A.M. Kindergarten
12:00 Buses leave Home School with P.M. Kindergarten
2:30  Dismissal
      Return to Home School

Buses will be on site 15 minutes prior to the leaving time at the Home School for both morning and noon pick ups.

There will be no transportation of Special Education Students who are located in regular school buildings. Alternate plans are being arranged for these pupils.

Secondary Schedule

8:00  Buses leave Home School
3:30  Dismissal
      Return to Home School

Secondary E.M.R. students will be transported to the alternate school site by Transportation, Inc.
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<th>SCHOOL</th>
<th>MONDAY</th>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
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<td>Beechcroft</td>
<td>Beechcroft J-S</td>
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<td>N. Linden(B)</td>
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<td>Maize(B)</td>
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<td>Walford(B)</td>
<td>Val. Forge(B)</td>
<td>Devonshire</td>
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<td>Briggs</td>
<td>Briggs</td>
<td>Lindbergh</td>
<td>Wedwood(B)</td>
<td>Hilltania</td>
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<td>Centennial</td>
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**SCHOOLS LISTED AT LEFT ARE THE HOST SCHOOLS**

Schools Using The Host’s Facilities Are Listed To The Right Under The Days They Attend
Schools closed
Feb. 7-March 7

By CHARLES FENTÓN
Citizen-Journal Staff Writer

Columbus Public Schools will remain closed through Wednesday due to the gas crisis, then will hold two days of classes before closing until March 7, officials said late Monday.

During the month-long shutdown, the district will broadcast lessons daily, and will try to provide at least one-half day of classes each week for all 96,000 Columbus students.

The decision to keep city schools closed until Thursday came after Columbia Gas of Ohio asked all commercial users to remain closed, if possible, due to continuing severe weather.

At a meeting Monday morning with all city school principals and teacher representatives from all buildings, Supt. John Ellis and other administrators outlined plans for the February shutdown.

"We have to close schools; there is no question about that," Ellis said. "The gas just is not there."

Under recently-imposed gas allocation cutbacks, the district has enough gas to last just two more weeks in the 177 board-owned buildings which use that fuel, he said.

Administrators prefer to make their own plans for a shutdown — leaving enough gas to keep building heat up before March, he noted.

"All of us must rally to show the entire community what educators are made of," Ellis said.

"If we just sit around and don't do anything, we'll get murdered."

All school employees will be kept on the payroll during the shutdown and will be expected to be available for assignments as needed, the superintendent said.

Teachers will report to their regular buildings Wednesday morning, to begin planning special activities for the coming three weeks.

The week of Feb. 28 to March 4 will be observed as "spring vacation," under a tentative agreement with the Columbus Education Association, Ellis said.

CEA's Legislative assembly will meet Tuesday morning to vote on that agreement and other guidelines for the emergency shutdown.

Columbus Board of Education will meet Tuesday afternoon to formalize the system's gas crisis plans.

During the shutdown, 29 city schools which can be heated with other fuels will serve as centers for communications and production of special study materials.

Plans call for those schools heated with electricity, fuel oil or coal also to be used for once-a-week classes for as many Columbus students as possible, Ellis said.

Students from around the city would rotate in the available heated rooms, with elementary students expected to have one-half day of classes each week, and most secondary students to have a full day.

But, Most of the learning that will go on during the remainder of February will depend on the initiative of Columbus teachers and their students, Ellis said.

He called on teachers to stretch their imaginations to find ways to keep education going in the city during the enforced shutdown.

"I want you to show the finest you can do, without a lot of petty rules from the administration," Ellis said.

"Some of what is going to happen will be marvelous," he predicted. "And some will be just rubbish."

To help the schools cope with their energy crisis, many groups and individuals around Columbus have offered heated space for educational activities, Ellis noted.

The city administration has offered the use of recreation centers and personnel, while the Center of Science and Industry and Battelle Memorial Institute auditorium also will be available, he said.

Teams of teachers are preparing lessons in many basic subjects for broadcast on local radio and television stations, beginning Feb. 7, said Howard Merriman, assistant superintendent for instruction.

Children will be encouraged to take their books home with them so they can follow the broadcast lessons, or to use lesson plans which will be printed in newspapers, Merriman said.

When students report to school Thursday and Friday, they will complete work from the semester which ended last week while schools were closed, and will be given long-term assignments for the emergency shutdown, he said.

Regular school buses will be available to take students to special activities and to those schools that will be open. In addition, officials are working on a plan to use some COTA buses during the emergency, Ellis said.

Arrangements to obtain "self-help" gas from some independent well owners are nearly completed, and should result in sufficient fuel to reopen the schools in March, Ellis said.

Even during the shutdown, gas-heated schools must use some fuel to keep facilities from being damaged by freezing, so the entire winter allocation from Columbia Gas will be used up before March, he noted.
Students in Columbus' gas-starved schools had another holiday Tuesday while school officials continued planning School without Schools which will nurse education along through February.

Students probably will get a spring break Feb. 28 through March 4, but will meet with their teachers periodically during the three weeks before that. Regular classes are to resume March 7.

AFTER A ROUND of meetings with officials of Columbia Gas of Ohio, Columbus city government and various cultural institutions, School Supt. John Ellis said:

School will be closed Tuesday and Wednesday.

Teachers will report to schools Wednesday for planning meetings for the School without Schools program.

Students will report to school Thursday and Friday to pick up books, get assignments, and find out how they are to stay in touch with their teachers.

ELLIS SAID plans for the remainder of the month, while still a little indefinite, call for students to meet with their teachers at least one day a week. A school spokesman said some elementary students will see their teachers virtually every day.

The sessions will be held in those schools which heat with something other than gas and in some city-owned and private facilities such as Battelle Memorial Institute.

School officials also plan field trips to institutions such as Battelle and COSI during the period the buildings are closed, and they are counting as well on educational programming on radio and television stations and the educational sections of The Dispatch and Citizen-Journal to make sure that knowledge flows more freely than gas.

THE COLUMBUS Education Association met Tuesday at Mohawk High School and ratified changes in the school calendar, and the school board was to consider the changes at a meeting set for later Tuesday.

The latest revision of school plans came Monday after the gas company announced continued curtailments to its commercial customers that use more than 200,000 cubic feet of gas a month. That includes many school buildings.

Ellis said the Columbus school system has 29 buildings that do not rely on gas for heating.

IN THE TUESDAY meetings, teacher representatives and the school board were to consider a change in dates of the spring vacation. It had been slated for April 11 through 15. By moving the break to Feb. 28 through March 4, it would come at the end of the School without Schools program and would get the school system through the winter season of high-gas curtailments.

Schools operated by the Columbus Catholic Diocese also were closed Tuesday and will not open Wednesday. Students are to get assignments Thursday, and the Catholic schools then will close through March 7 because of the energy crisis.

The Ohio General Assembly within the next two weeks is expected to consider legislation that would save the schools from having to make up days lost because of energy emergencies.
Dear Parents:

We apologize for the inconveniences, but we are in a bind. The gas company has said there simply isn't enough gas to keep schools open. So we have to close most schools for a month beginning Feb. 7. Spring vacation will be moved from April to the week of Feb. 28.

Despite the difficulties, we want to continue to keep learning alive during the Feb. 7-25 period. Education will be offered in different places and in different ways. But if you and your children want to learn, the "School Without Schools" program will provide a lot of opportunities.

We need unusual cooperation. Teachers are organizing a variety of ways to keep in touch with their students. Television, telephones, radio, newspapers, and regular classrooms all will be important. Small groups, large groups, regular groups and field trips of all descriptions are part of the program. You can expect to receive specific information from your school and through the media.

Your children can learn a lot during this time or they can waste the opportunity. You get out of education what you put into it. That will certainly be true during the next three weeks. Please insist that your children watch the appropriate programs, listen to the radio programs, follow the newspaper instructions, and do their homework. Also be certain that they report to school at scheduled times and participate in the other educational activities.

We aren't going to send the truant officer after people who don't participate. We don't have time for that. We expect participation and strongly encourage it, but you are the real loser if you sit on the sidelines. We also expect good discipline. We don't have time to beg anyone to behave, and if students cause problems, they will be quickly excluded.

We face an emergency. It will require the best in us. If you can help in any way, or have suggestions, please let your principal or teacher know.

The Mayor, city officials, the news media and community organizations have been terrific. We have an opportunity to turn a bad situation into something good. The Board of Education and I enthusiastically welcome your participation, understanding and cooperation in the "School Without Schools" program. Working together we can insure that your children continue to learn during this crisis period.

John Ellis, Superintendent
Final Preparations, Guide Ready For School Sessions

By Robert Albrecht

Columbus Public School principals and their assistants met at Mohawk High School late Wednesday afternoon for a crash course in emergency school preparations and got a 100-page document to guide them over the next three weeks while schools are closed.

Supt. John Ellis and other administrators gave the school officials as much information as they could regarding operations during the shutdown made necessary by natural gas shortages, but cautioned them that plans could change daily.

Each page in the guide was dated so that it can be discarded if a more current order is needed.

The guide covers everything from payroll reporting to where to find the various administrators during the three weeks so they can answer questions that will come up unexpectedly.

The Dispatch will publish school and bus schedules, the location of school administrators, and radio and television listings of educational programming in the Friday edition. This information will be carried as Classroom Extra, Page Three.

Student attendance during the three-week period is mandatory, administrators said. The regular school lunch program will be in effect, too.

Thursday and Friday were to be used by secondary school teachers as testing days so grades could be tabulated before the schools close. Elementary teachers were able to complete the grading period last week.

School officials have been offered the use of 10 locations throughout the Columbus area for emergency day care centers. Damon Asbury, a director in planning, research and development, said.

Children six to 12 years old whose parents both work will be able to stay at the centers when they are not in class or at some school-sponsored activity.

Asbury said Franklin County and United Way officials secured emergency facilities at such places as the Salesian Boys Club, the South Side Settlement House and the YWCA. About 1,700 students will be able to take part in the day care center activities, he said.

Some of the expectations administrators have developed for the "School without Schools" program and teachers include:

- Pupils will take textbooks home, as instructed by their teachers, and are to complete assignments during the three-week period.
- Teachers are expected to determine who to call in case of emergency while a pupil is under their care.
- Teachers should arrange for as many additional activities involving pupils as is possible, including lessons in the media, visits to community facilities, and such activities as they are able to create.
- Pupils are expected to take part in the activities, and parents are expected to help see that they do.
- Teachers are expected to record grades on the performance of pupils on assignments made and tests given during the "School without Schools" project.
- Teachers are expected to keep themselves available for professional assignments as needed.

School Activities To Be Continued

Some Columbus Public School activities will continue during the month-long shutdown even though the natural gas shortage has cancelled most classes.

Supt. John Ellis said alternate fuel supplies will enable continuation of classes for crippled children, the Licensed Practical Nursing program, all CETA programs and the adult high school.

Registration for both day and evening adult high school classes will be held from 6 to 9 p.m. Thursday at Mohawk High School, which uses coal for heating.

Classes for both sessions will be held at Mohawk, instead of Central High School, which will be closed.

Also continuing during the shutdown period are programs at Dodd and Means Halls at Ohio State University, the Florence Crittenton Home, Children's Hospital, Upham Hall at University Hospital, St. Vincent Children's Center and classes for wards of the Franklin County Juvenile Court.

Athletic activities and some music and drama programs are being scheduled in school or community buildings not using gas.
By CHARLES FENTON
Citizen-Journal Staff Writer

Active cooperation of all Columbus Public Schools teachers, students and parents will be necessary to assure success of the district’s “School Without Schools” program, Supt. John Ellis told the Board of Education Tuesday.

The board voted formal approval for the program, to begin next week, and authorized closing all city schools from the end of the school day Friday until March 7, due to the gas shortage.

BECAUSE THEY will try to continue some education, even with nearly 150 buildings closed, administrators are calling the emergency program “School Without Schools,” Ellis explained.

“Students are expected to participate in all scheduled activities during the shutdown; and we call on parents to insist that they do,” Ellis said.

ACTIVITIES WILL include lessons broadcast daily on television and radio, once-a-week classes in the 29 city schools heated by other fuels, and special field trips, he said.

In addition, Columbus city recreation centers will present mini-courses in almost 100 topics. The mini courses are being prepared especially for the school shutdown, Ellis said.

Students from each of the 150 gas-heated buildings which must be closed will be assigned to one of the 29 schools heated by electricity, fuel oil or coal, he said.

ONE DAY EACH week the re-assigned students will be picked up at their regular schools and transported to their alternate school, where they will be taught by their regular teachers, Ellis said.

On those days, students will turn in homework, pick up assignments and receive instructions on other weekly activities, he said.

TEACHERS WILL take attendance at scheduled activities, and will give grades on work handled in the shutdown, he said.

Activities scheduled during the shutdown, plus the 15-day fuel emergency allowance measure expected to be passed by the Legislature, should permit the district to write off regular days missed during the month, he said.

That would allow Columbus schools to complete their regular calendar by June 17, as scheduled, Ellis said.

HE PRAISED THE Columbus Education Association, which represents city teachers, for agreeing to change spring vacation from April 15 to March 20.

Some programs, including adult high school, crippled children’s school, the school of practical nursing and all CETA programs, will continue uninterrupted during the shutdown.

INTERSchOLASTIC athletics and some music and drama activities will be rescheduled into non-gas heated buildings, Ellis said.

ONE OF THE most important lessons we teach is that people must continue to learn after they leave school,” he said.

“This program will help demonstrate that individual initiative and persistence are vital in getting an education,” he said.

Revised calendar for city schools announced by Board of Education

Here’s the calendar for Columbus Public Schools’ 96,000 students, revised Tuesday by the Board of Education due to the district’s gas crisis:

Wednesday —
Schools remain closed, but teachers report for emergency planning.

Thursday and Friday —
All city schools open; students report to complete work for first semester, and pick up assignments and schedules for “shutdown.”

March 7 —
“School Without Schools” in some district buildings and various community centers. All students required to take part in scheduled activities. Attendance will be taken, and grades given for assigned work.

Feb. 28 to March 4 —
“Spring Vacation,” rescheduled from April 11 to 15; no classes.

March 7 —
Regular classes resume. Officials expect to observe April 8 (Good Friday), and May 30 (Memorial Day) as holidays, and to end the school year on June 17, as scheduled earlier.

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Parents who need babysitting help because of the closing of the Columbus schools may get help from 22 United Way agencies during the month the schools are closed.

The Columbus Board of Education, Columbus Education Association, and United Way (UW) have developed plans for children's programs at the agencies.

THE PROGRAMS WILL help children, primarily in kindergarten through 6th grade, whose parents must work.

Announcement of the plan was made Friday by Supt. Dr. John Ellis, CEA President Ted Thomas and United Way Executive Director Al Dietzel.

Teachers will be provided at the locations to help with instruction, recreation and cultural activities.

The agencies will serve a total of 2,155 new children, Dietzel said.

THE LOCATIONS FOR the emergency child care program are West Side Boys Club, 115 S. Gift-st; Milo Grogan Boys Club, 1012 Cleveland-av; Big Brothers, 2104 Fuller-st; St. Aloysius (Catholic Social Services), 197 E. Gay-st; Epilepsy Association, 144 E. State-st; Gladden Community House, 183 Hawkes-av; Hilltop Civic Council, 2510 Sullivan-av; Rosemont School, 24-40 Davenport-av; Salesian Boys Club, 89 S. Sixth-st; Southside Settlement House, 363 Reeb-av; YMCA, 85 S. Fourth-st; North Side Day Care Center, 94 E. Third-av; West Side Day Care Center, 40 N. Grubb-st; Ohio Avenue Day Care Center, 162 N. Ohio-av; South Side Day Care Center, 255 Reeb-av; Neighborhood House, 1000 Atcheson-st; St. Stephen's Community House, 1790 Cleveland-av; Hilltop YMCA, 2879 Valleyview; South Side YMCA, 190 Southwood-av; Central Branch, YMCA, 40 W. Long-st; East Side YMCA, 130 Woodland-av; and the Jewish Center, 1123 S. College-av.

MEANWHILE, UNITED WAY will have to 'lose 10 of its 11 food pantries Saturday because they have run out of food.

Jim Sanders, disaster coordinator for UW, said there is a critical need for more food and particularly for warm blankets.

The pantries were set up with extended hours a week ago when severe weather hit.

LEFT OPEN WILL BE St. Stephens Community House, which has been handling around 60 requests for food a day.

Persons wishing to donate food, so some of the pantries may open again, may call the UW office at 486-5331. Pick-up and delivery of food donated is being arranged by that office for people without transportation.
School Hopes Dim

To the Editor:

Teachers and school employee unions may strike almost directly against the taxpayers for still higher salaries, wages and fringes with school closings during negotiations, and causing a serious impasse between the two groups.

A SMALL BENEFIT would be derived from passing further school tax levies on which property-owning taxpayers and others would default owing to inability to pay the higher rates.

Next comes Mother Nature and her strike with a 10-inch snowfall and 20 to 25 degree below zero cold. The result? Schools close.

THEN THERE is old Father Time, saying he is running out of fuel to keep the scholars and teachers warm. The result? Schools closed.

So, with three called strikes on them, the future of the public schools looks rather bleak.

George S. Korell.
Columbus.
These are broadcast lessons prepared by teams of Columbus teachers to keep area students in touch with education while schools are closed due to the gas crisis.

Reading textbooks referred to in listings for WBNS-TV are those used in Columbus Public Schools, but officials say the lessons will be useful for all students.

Programming for WBNS-TV

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30 a.m.</td>
<td>Beginning Reading - Lions, Tigers, Dinosaurs — A visit from Dr. Charlotte Hock of Ohio State University, a national authority on reading.</td>
</tr>
<tr>
<td>7:45 a.m.</td>
<td>Reading - Rainbows — Colors are used to teach phonics in the story Annie's Rainbow.</td>
</tr>
<tr>
<td>8:00 a.m.</td>
<td>Reading - Secrets — The importance of vocabulary study is stressed by reading Folk Tales.</td>
</tr>
<tr>
<td>8:15 a.m.</td>
<td>Reading - Rewards — A highly motivated reader becomes a good reader.</td>
</tr>
<tr>
<td>8:30 a.m.</td>
<td>Reading - Panorama and Fiesta — Phonics decoding skills are practiced through signs, tongue twisters and songs.</td>
</tr>
<tr>
<td>9:00 a.m.</td>
<td>Reading - Kaleidoscope, Images, Galaxies — Being able to classify literature is important to good reading.</td>
</tr>
<tr>
<td>9:15 a.m.</td>
<td>Special Education for Basic Living Skills — The do's and don'ts of applying for a job.</td>
</tr>
<tr>
<td>9:30 a.m.</td>
<td>Fine and Performing Arts — Music reading, rehearsal problems, interpretation, and discipline are studied as they apply to live ensembles.</td>
</tr>
<tr>
<td>10:00 a.m.</td>
<td>Physical Science — An illustration of the periodic motion of a pendulum and the factors which effect this period.</td>
</tr>
<tr>
<td>10:15 a.m.</td>
<td>Contemporary Math — &quot;Summing it up.&quot;</td>
</tr>
<tr>
<td>10:30 a.m.</td>
<td>American History — The situation and the problems of the &quot;Old West&quot; as they have developed until today.</td>
</tr>
<tr>
<td>10:45 a.m.</td>
<td>Senior High Grammar and Composition — Sure ways for six papers.</td>
</tr>
<tr>
<td>11:00 a.m.</td>
<td>World History — A study of the Philippines. Discussion of the place of a primitive people in our current world.</td>
</tr>
<tr>
<td>11:15 a.m.</td>
<td>Biology — A look at the supporting structures of animals with emphasis on the mammalian skeleton.</td>
</tr>
</tbody>
</table>

Programming for WCBS-TV

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>11:00 a.m.</td>
<td>Intermediate Science — A look at heat and its properties.</td>
</tr>
<tr>
<td>11:15 a.m.</td>
<td>Intermediate Math — Measurement skills are practiced in real world applications.</td>
</tr>
<tr>
<td>11:30 a.m.</td>
<td>Vocational Education — Steps in filing the Federal income tax short form 1040-A. Students should have their W-2 statements and 1040-A form.</td>
</tr>
<tr>
<td>11:45 a.m.</td>
<td>Vocational Education — All about CB radios.</td>
</tr>
</tbody>
</table>

Programming for WTWN-TV

<table>
<thead>
<tr>
<th>Time</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 a.m.</td>
<td>7th Grade Math — Word problems involving all fraction operations.</td>
</tr>
<tr>
<td>9:15 a.m.</td>
<td>6th Grade Math — &quot;Pink Panther's Last Case&quot; — Picture and circle graphs.</td>
</tr>
<tr>
<td>9:30 a.m.</td>
<td>Diocesan Catholic Schools — Something Special — Part 1.</td>
</tr>
<tr>
<td>10:00 a.m.</td>
<td>Diocesan Catholic Schools — Something Special — Part 2.</td>
</tr>
<tr>
<td>10:30 a.m.</td>
<td>Impact of the Arts Sounding Jazzy: Interpretation of jazz symbols used to create the jazz sound.</td>
</tr>
<tr>
<td>11:00 a.m.</td>
<td>Elementary Literature - Intermediate — How audio visual media are cataloged in libraries.</td>
</tr>
<tr>
<td>11:30 a.m.</td>
<td>Current Issues — WCBS Radio, 90.5 FM.</td>
</tr>
<tr>
<td>12:00 noon.</td>
<td>French — Basic language instruction. Includes simple structures and dialogues, and cultural capsules.</td>
</tr>
<tr>
<td>12:30 p.m.</td>
<td>Spanish — Basic language. Includes simple structure and dialogue, and cultural capsules.</td>
</tr>
<tr>
<td>1:00 p.m.</td>
<td>Current Issues — WCBS Radio, 90.5 FM.</td>
</tr>
<tr>
<td>1:15 p.m.</td>
<td>Senior High Language Skills — A review of our study of language.</td>
</tr>
<tr>
<td>1:45 p.m.</td>
<td>Senior High Literature — A mini-quiz over the week's lesson. An assignment for a short, short story project.</td>
</tr>
<tr>
<td>2:15 p.m.</td>
<td>Let's Imagine, K-L State Fair Visit, Signs, Synonyms, Antonyms, Rhyming Words, Math Review.</td>
</tr>
<tr>
<td>3:00 p.m.</td>
<td>Second Grade, Related Mathematics and Language Arts Activities, Ohio Pre-K Grant and Harding.</td>
</tr>
<tr>
<td>4:00 p.m.</td>
<td>Third Grade, Review of Addition, Subtraction and Multiplication, Writing Stories.</td>
</tr>
<tr>
<td>4:30 p.m.</td>
<td>Fourth Grade, Spelling Test and Mathematics Culmination.</td>
</tr>
<tr>
<td>5:00 p.m.</td>
<td>Let's Get It Together, Fifth Grade, Riddles, Multiplication, Rationale Numbers, Sentence Skills, Story Endings.</td>
</tr>
<tr>
<td>5:30 p.m.</td>
<td>Radio Six, Sixth Grade, Thought Problems, Spelling Test, interview.</td>
</tr>
</tbody>
</table>

All programs are repeated starting at 12:30 p.m.
Transportation guidelines for Columbus public schools during the energy crisis

**ELEMENTARY SCHEDULE**
For schools whose children will be delivered from a Home School to an alternate school, the following schedule will be in effect:
- 9:00—Buses leave Home School.
- 11:30—Buses leave alternate site with A.M. Kindergarten.
- 12:00—Buses leave Home School with P.M. Kindergarten.
- 2:30—Dismissal.
- Return to Home School.

Buses will be on site 15 minutes prior to the leaving time at the Home School for both morning and noon pick-ups.

There will be no transportation of Special Education Students who are located in regular school buildings. Alternate plans are being arranged for these pupils.

**SECONDARY SCHEDULE**
- 8:00—Buses leave Home School.
- 3:30—Dismissal.
- Return to Home School.

Secondary E.M.R. students will be transported to the alternate school site by Transportation, Inc.

**LOADING AND SUPERVISION**
Buses will be on site 15 minutes prior to the scheduled departure time at the Home School. Buses are to be loaded one at a time with the lead bus being loaded first until full. As soon as a bus is full, it will leave for the alternate school site, discharge the children, and return to home school with possible second load trip.

Principals should see that a staff member is assigned to the loading site to assist with the management and loading of pupils.

**NEIGHBORHOOD ROUTES**
Where neighborhood routes are normally transported to a Home School, those routes will operate and will transport the students to the alternate school site.

An attempt will be made to operate those routes as close to schedule as possible for morning pick up. All afternoon take home trips will need to be adjusted according to the revised school day schedule.

*The following programs are repeats of morning lessons.*

*12:30 p.m. Kdgn. — First Language Arts and Math*
*1:00 p.m. Second Grade Language Arts and Math*
*1:30 p.m. Third Grade Language Arts and Math*
*2:00 p.m. Fourth Grade Language Arts and Math*
*2:30 p.m. Fifth Grade Language Arts and Math*
*3:00 p.m. Sixth Grade Language Arts and Math*
*3:30 p.m. School Without Schools Announcements*
C. To describe the Delivery of the School Without Schools Program

Information about the degree to which the design was implemented is provided in Chapter III of this report. Further information compiled by the media and by Columbus Public Schools personnel is given on the following pages.

Noteworthy points regarding the implementation of the program are the following:

1. Variance in the nature and degree of instructional activity by teachers during the crisis was high and individualistic. Highly motivated teachers were creative and dedicated in their performance; others did little more than was required (one day per week). Elementary teachers generally demonstrated a higher degree of enthusiasm and dedication than did secondary teachers.

2. The extent of volunteerism within the community was high, witness the following tabulation:

<table>
<thead>
<tr>
<th>Non-School Facilities Used for Instructional Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Homes</td>
</tr>
<tr>
<td>Recreation Center</td>
</tr>
<tr>
<td>Churches</td>
</tr>
<tr>
<td>Banks</td>
</tr>
<tr>
<td>Restaurants</td>
</tr>
<tr>
<td>Fraternal</td>
</tr>
<tr>
<td>Private Recreational</td>
</tr>
<tr>
<td>Hospitals</td>
</tr>
<tr>
<td>Hotel/Motel</td>
</tr>
<tr>
<td>University/Schools</td>
</tr>
<tr>
<td>Businesses/Stores</td>
</tr>
<tr>
<td>Apartment Party House</td>
</tr>
<tr>
<td>Day Care/Community Centers</td>
</tr>
<tr>
<td>Federal Government</td>
</tr>
<tr>
<td>Library Branches</td>
</tr>
<tr>
<td>Public Schools</td>
</tr>
</tbody>
</table>

   | 864 |

   Total                                                   | 890 |

   As of 2/18/77, 125 schools reporting.

3. There was high variance among students and their parents in their level of involvement and commitment to the Program. There did not appear to be any systematic factor that would account for this variance.
4. Little disruption of community life (crime, child mistreatment, work, communication, transportation, basic needs) occurred other than the need for child care at home.

5. There was a general slowdown in the pace of scheduled instruction during the program. Little change in curricular emphasis was noted, although "peripheral" subjects such as health, physical education, foreign language, did appear to receive less attention.

6. The instructional strategies most often used by students were one day at school and homework.

Readers not interested in the details of the implementation of the program may want to skip to page 371.
In January 1977 the Columbus Public Schools were notified by Columbia Gas of Ohio they were going to increase natural gas curtailments in 45 large school facilities and place new curtailments into effect for 129 of our smaller buildings. These new curtailments, high usage of natural gas during November and December, anticipated continued high usage in January, February, and March, and other fuel problems placed the Columbus Schools in a most precarious position.

It was anticipated that in order to continue school even at much reduced temperatures the Columbus Schools would need to have 230 million cubic feet of natural gas during February and March. Of that supply, less than 64 million cubic feet was available. Only enough fuel remained to keep schools open through February 17, 1977.

Very little natural gas remained, even for basic needs in order to keep buildings from freezing. This had to be prevented as long as possible.

These facts were reported to the Superintendent of Schools and he decided to close schools to

1) protect the public's investment of hundreds of millions of dollars in school building for as long a time as possible.

2) give us time to search for new supplies of natural gas from independent producers.

3) afford us the opportunity to alter the fuel supply requirements of as many buildings as possible from natural gas to fuel and coal.

4) assist Columbia Gas of Ohio in their attempts to protect natural gas service to homes, hospitals, and other human needs.
To: Daman Asbury
From: Calvin Smith
Subject: Gas conservation accrued during the recent thirty day closing
Date: March 10, 1977

For the period February 4, 1977 through March 7, 1977 I had estimated that under less than normal temperatures the Columbus Public Schools would have consumed 134.8 million cubic feet of natural gas. My estimate from gas meter readings taken by DERP personnel during the period referenced is that we consumed 40.93 million cubic feet of natural gas. It would appear that we have saved 93.87 million cubic feet of natural gas. I would estimate that this is a savings of $178,165.00 not spent in this area which ordinarily might have been.

If Columbia Gas of Ohio had diverted the conservation to residential consumers, 2700 homes were heated during our closed period by the gas we saved.
<table>
<thead>
<tr>
<th></th>
<th>Elementary Attendance</th>
<th>%</th>
<th>Secondary Attendance</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7-11</td>
<td>44,428</td>
<td>86.6</td>
<td>34,333</td>
<td>81.9</td>
</tr>
<tr>
<td>February 14-18</td>
<td>44,127</td>
<td>86.0</td>
<td>33,573</td>
<td>80.1</td>
</tr>
<tr>
<td>February 21-25</td>
<td>42,446</td>
<td>82.7</td>
<td>31,621</td>
<td>75.4</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>43,667</td>
<td>85.1</td>
<td>33,176</td>
<td>79.2</td>
</tr>
<tr>
<td></td>
<td>ENROLLMENT</td>
<td>ATTENDANCE</td>
<td>%</td>
<td>ENROLLMENT</td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>------------</td>
<td>----</td>
<td>------------</td>
</tr>
<tr>
<td>MONDAY</td>
<td>12015</td>
<td>9212</td>
<td>76.7</td>
<td>9038</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>10669</td>
<td>8764</td>
<td>82.1</td>
<td>8146</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>10530</td>
<td>9027</td>
<td>85.7</td>
<td>9563</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>6095</td>
<td>5147</td>
<td>84.4</td>
<td>8040</td>
</tr>
<tr>
<td>FRIDAY</td>
<td>2603</td>
<td>2183</td>
<td>83.9</td>
<td>16511</td>
</tr>
<tr>
<td>ALL</td>
<td>41212</td>
<td>34333</td>
<td>81.9</td>
<td>51298</td>
</tr>
<tr>
<td></td>
<td>Secondary</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>ENROLLMENT</td>
<td>ATTENDANCE</td>
<td>%</td>
<td>ENROLLMENT</td>
</tr>
<tr>
<td>MONDAY</td>
<td>12015</td>
<td>9418</td>
<td>78.4</td>
<td>9038</td>
</tr>
<tr>
<td>TUESDAY</td>
<td>10669</td>
<td>8359</td>
<td>78.3</td>
<td>8146</td>
</tr>
<tr>
<td>WEDNESDAY</td>
<td>10530</td>
<td>8707</td>
<td>82.7</td>
<td>9563</td>
</tr>
<tr>
<td>THURSDAY</td>
<td>6995</td>
<td>4906</td>
<td>80.5</td>
<td>8040</td>
</tr>
<tr>
<td>FRIDAY</td>
<td>2603</td>
<td>2153</td>
<td>83.9</td>
<td>16511</td>
</tr>
<tr>
<td>TOTAL</td>
<td>41912</td>
<td>33573</td>
<td>80.1</td>
<td>51298</td>
</tr>
</tbody>
</table>

382
# School Without Schools
## Attendance Report
### February 21 - 25, 1977

<table>
<thead>
<tr>
<th></th>
<th>Secondary</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enrollment</td>
<td>Attendance</td>
<td>%</td>
</tr>
<tr>
<td>Monday</td>
<td>12015</td>
<td>9024</td>
<td>75.1</td>
</tr>
<tr>
<td>Tuesday</td>
<td>10669</td>
<td>8012</td>
<td>75.1</td>
</tr>
<tr>
<td>Wednesday</td>
<td>10530</td>
<td>8242</td>
<td>75.3</td>
</tr>
<tr>
<td>Thursday</td>
<td>6095</td>
<td>4592</td>
<td>75.3</td>
</tr>
<tr>
<td>Friday</td>
<td>2603</td>
<td>1730</td>
<td>66.5</td>
</tr>
<tr>
<td>Total</td>
<td>41912</td>
<td>31621</td>
<td>75.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Elementary</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enrollment</td>
<td>Attendance</td>
<td>%</td>
</tr>
<tr>
<td>Monday</td>
<td>9038</td>
<td>7695</td>
<td>85.1</td>
</tr>
<tr>
<td>Tuesday</td>
<td>9146</td>
<td>6970</td>
<td>85.6</td>
</tr>
<tr>
<td>Wednesday</td>
<td>9563</td>
<td>7559</td>
<td>79.1</td>
</tr>
<tr>
<td>Thursday</td>
<td>8040</td>
<td>6286</td>
<td>73.2</td>
</tr>
<tr>
<td>Friday</td>
<td>16511</td>
<td>13236</td>
<td>84.4</td>
</tr>
<tr>
<td>Total</td>
<td>51298</td>
<td>42446</td>
<td>82.7</td>
</tr>
</tbody>
</table>
To Mr. Lucien Wright

FROM: Carol Reese, Volunteer Services  
Subject: Volunteer Placement in Day Care Centers

The Volunteer Services office received 62 names in response to the need for volunteer participation in Emergency Day Care Centers during the "School Without Schools" period. Our referrals are listed as follows:

<table>
<thead>
<tr>
<th>Center</th>
<th>Number Referred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Big Brothers'</td>
<td>03</td>
</tr>
<tr>
<td>Community College</td>
<td>03</td>
</tr>
<tr>
<td>Epilepsy Center</td>
<td>03</td>
</tr>
<tr>
<td>Milo-Grogan</td>
<td>02</td>
</tr>
<tr>
<td>Neighborhood House</td>
<td>01</td>
</tr>
<tr>
<td>(OSU students)</td>
<td>10</td>
</tr>
<tr>
<td>North Side</td>
<td>06</td>
</tr>
<tr>
<td>St. Aloysius</td>
<td>02</td>
</tr>
<tr>
<td>St. Stephen's (OSU)</td>
<td>-10</td>
</tr>
<tr>
<td>YMCA</td>
<td>01</td>
</tr>
<tr>
<td>Jewish Center</td>
<td>02</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>43</td>
</tr>
</tbody>
</table>

*Call-ins not referred (lack of transportation, parking cost, etc.) 3
*Mifflin Juniors High School Students (placement limited due to shortage of teacher supervision) 14
*Sullivan Elementary School Library 02

Copy: Mrs. Frances White
## Summary

**ESTIMATED PUPIL TRANSPORTATION TO ASSIGNED SITES FOR INSTRUCTION DURING "SCHOOL WITHOUT SCHOOLS"**

<table>
<thead>
<tr>
<th>Type of Vehicle</th>
<th>Number Operating</th>
<th>(Estimated) Pupils Transported Daily</th>
<th>(Estimated) &quot;School Without School&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>66-passenger</td>
<td>119</td>
<td>11,900</td>
<td>178,500</td>
</tr>
<tr>
<td>32-passenger</td>
<td>60</td>
<td>1,680</td>
<td>25,200</td>
</tr>
<tr>
<td>Lift Buses</td>
<td>7</td>
<td>300</td>
<td>4,500</td>
</tr>
<tr>
<td>Spares</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>196</strong></td>
<td><strong>13,880</strong></td>
<td><strong>207,700</strong></td>
</tr>
</tbody>
</table>

Includes public and non-public schools. Non-public schools account for approximately 15% of the total.
Summary

USE OF CITY RECREATION CENTERS FOR INSTRUCTIONAL PURPOSES

<table>
<thead>
<tr>
<th></th>
<th>Schools</th>
<th>Students</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7-11</td>
<td>35</td>
<td>4,505</td>
<td>619</td>
</tr>
<tr>
<td>February 14-18</td>
<td>45</td>
<td>6,160</td>
<td>690</td>
</tr>
<tr>
<td>February 21-25</td>
<td>39</td>
<td>4,284</td>
<td>529</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>47</strong></td>
<td><strong>14,949</strong></td>
<td><strong>1,838</strong></td>
</tr>
</tbody>
</table>

*Represents an unduplicated count of schools.
### NON-SCHOOL FACILITIES USED FOR INSTRUCTIONAL PURPOSES*

<table>
<thead>
<tr>
<th>Facility Type</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private Homes</td>
<td>693</td>
</tr>
<tr>
<td>Recreation Centers</td>
<td>29</td>
</tr>
<tr>
<td>Churches</td>
<td>59</td>
</tr>
<tr>
<td>Banks</td>
<td>12</td>
</tr>
<tr>
<td>Restaurants</td>
<td>28</td>
</tr>
<tr>
<td>Fraternal</td>
<td>3</td>
</tr>
<tr>
<td>Private Recreational</td>
<td>16</td>
</tr>
<tr>
<td>Hospitals</td>
<td>9</td>
</tr>
<tr>
<td>Hotel/Motel</td>
<td>4</td>
</tr>
<tr>
<td>University/Schools</td>
<td>7</td>
</tr>
<tr>
<td>Businesses/Stores</td>
<td>33</td>
</tr>
<tr>
<td>Apartment Party Houses</td>
<td>16</td>
</tr>
<tr>
<td>Day Care/Community Centers</td>
<td>39</td>
</tr>
<tr>
<td>Federal Government</td>
<td>1</td>
</tr>
<tr>
<td>Library Branches</td>
<td>19</td>
</tr>
<tr>
<td>Public Schools</td>
<td>36</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1004</strong></td>
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</table>

*As of 2/25/77, 150 schools reporting.*
### Summary

"SCHOOL WITHOUT SCHOOLS"
LUNCHES SERVED AT ALTERNATE SCHOOLS/SITES

<table>
<thead>
<tr>
<th></th>
<th>Number of Sites</th>
<th>Number of Lunches</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7-11</td>
<td>25</td>
<td>6,414</td>
</tr>
<tr>
<td>February 14-18</td>
<td>26</td>
<td>7,878</td>
</tr>
<tr>
<td>February 21-25</td>
<td>25</td>
<td>7,371</td>
</tr>
<tr>
<td>TOTAL</td>
<td>26*</td>
<td>21,663</td>
</tr>
<tr>
<td>AVERAGE DAILY</td>
<td>18.5</td>
<td>1,444</td>
</tr>
</tbody>
</table>

*Unduplicated count of sites.*
February 28, 1977

Mr. E. Tilton
cc. Mr. C. Hartman
cc. Dr. Damon Asbury

Lunches served by Production Center during "School without schools"

Attached to this memo are the participation reports for meals served from the Food Service Production Center. A breakdown of this report is as follows:

1. Hot Lunches served in Elementary Schools (17 locations) 66,674
2. Cold Lunches served in Elementary Schools (1 location *) 2,479
3. Cold Lunches served in United Way Agency Facilities (18 locations) 14,103
4. Cold Lunches served in "Alternate Sites"** (5 locations) 5,091

Total Lunches - Food Services Production Center 87,347

*Shady Lane - not equipped to serve hot lunches

** Non-school locations arranged for by schools:
   Douglas - Bancroft Plaza, Broad Street Presbyterian Church, COSI
   Windsor - Windsor Recreation Center
   Duxbury - Village Green Party House

Michael B. Morrill
"School Without Schools"

MEDIA INSTRUCTIONAL TIME

<table>
<thead>
<tr>
<th>Elementary (K-6)</th>
<th>Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>WBNS-TV 1:45 daily x 15 days</td>
<td>26.25</td>
</tr>
<tr>
<td>Math</td>
<td>WCBE-FM 1:30 daily x 15 days</td>
<td>22.50</td>
</tr>
<tr>
<td>Language Arts</td>
<td>WCBE-FM 1:30 daily x 10 days</td>
<td>5.00</td>
</tr>
<tr>
<td>Social Studies</td>
<td>WCBE-FM 1:30 daily x 15 days</td>
<td>22.50</td>
</tr>
<tr>
<td>Fine &amp; Performing Arts</td>
<td>WBNS-TV :15 daily x 15 days</td>
<td>3.75</td>
</tr>
<tr>
<td></td>
<td>WTVN-TV :15 daily x 10 days</td>
<td>2.50</td>
</tr>
<tr>
<td></td>
<td>WBNS-AM :15 daily x 15 days</td>
<td>3.75</td>
</tr>
<tr>
<td>Science</td>
<td>WCMH-TV :30 daily x 10 days</td>
<td>5.00</td>
</tr>
<tr>
<td>Literature</td>
<td>WTVN-TV :30 daily x 10 days</td>
<td>5.00</td>
</tr>
<tr>
<td>Special Education</td>
<td>WBNS-TV :15 daily x 15 days</td>
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</table>

**TOTAL** 122.50

Daily Average 8.16 hours

<table>
<thead>
<tr>
<th>Total TV Time</th>
<th>51.25</th>
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<tbody>
<tr>
<td>Daily Average</td>
<td>3.41</td>
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</tbody>
</table>

| Total Radio Time | 71.25 |
| Daily Average   | 4.75  |
"School Without Schools"

**MEDIA INSTRUCTIONAL TIME**

<table>
<thead>
<tr>
<th>Secondary (7-12)</th>
<th>Description</th>
<th>Hours</th>
</tr>
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<tr>
<td>Math</td>
<td>WBNS-TV :30 daily x 15 days</td>
<td>7.50</td>
</tr>
<tr>
<td></td>
<td>WTVN-TV :30 daily x 10 days</td>
<td>5.00</td>
</tr>
<tr>
<td>Language Arts</td>
<td>WBNS-TV :30 daily x 15 days</td>
<td>7.50</td>
</tr>
<tr>
<td></td>
<td>WBNS-AM :45 daily x 15 days</td>
<td>11.25</td>
</tr>
<tr>
<td>Social Studies</td>
<td>WBNS-TV :30 daily x 15 days</td>
<td>7.50</td>
</tr>
<tr>
<td>Fine &amp; Performing Arts</td>
<td>WBNS-AM 1:00 daily x 15 days</td>
<td>15.00</td>
</tr>
<tr>
<td></td>
<td>WTVN-TV :30 daily x 10 days</td>
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</tr>
<tr>
<td></td>
<td>WBNS-AM :15 daily x 15 days</td>
<td>3.75</td>
</tr>
<tr>
<td>Science</td>
<td>WBNS-TV :15 daily x 15 days</td>
<td>3.75</td>
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<tr>
<td>Foreign Language</td>
<td>WBNS-AM 1:30 daily x 15 days</td>
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<tr>
<td>Vocational Education</td>
<td>WCIM-TV :30 daily x 10 days</td>
<td>5.00</td>
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</table>

**TOTAL** 97.50

Daily Average 6.50 hours

Total TV Time 45.00 hours

Daily Average 3.00 hours

Total Radio Time 52.50 hours

Daily Average 3.50 hours
<table>
<thead>
<tr>
<th>Week of 2/7 - 2/11</th>
<th>Senior High, Junior High, and Elementary Schools</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Field Trips</th>
<th>Tutoring</th>
<th>Small Group Instruction</th>
<th>Telephone/Media Visits</th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Field Trips</strong></td>
<td><strong>Teachers</strong></td>
<td><strong>Students</strong></td>
<td><strong>Teachers</strong></td>
<td><strong>Students</strong></td>
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<tr>
<td>7</td>
<td>20</td>
<td>45</td>
<td>101</td>
<td>335</td>
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<tr>
<td>8</td>
<td>47</td>
<td>110</td>
<td>161</td>
<td>890</td>
</tr>
<tr>
<td>9</td>
<td>79</td>
<td>165</td>
<td>2370</td>
<td>53</td>
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<tr>
<td>10</td>
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<td>96</td>
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<tr>
<td>11</td>
<td>56</td>
<td>194</td>
<td>3101</td>
<td>72</td>
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<tr>
<td>12</td>
<td>32</td>
<td>713</td>
<td>10,536</td>
<td>483</td>
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<tr>
<td></td>
<td>Field Trips</td>
<td>Small Group Instruction</td>
<td>Telephone/ Home Visits</td>
<td>Total</td>
</tr>
<tr>
<td>----------</td>
<td>-------------</td>
<td>-------------------------</td>
<td>------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>No. of Field Trips</td>
<td></td>
<td>Teacher</td>
<td>Student</td>
<td>Teacher</td>
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<td></td>
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</tr>
<tr>
<td>14</td>
<td>89</td>
<td>195</td>
<td>3256</td>
<td>104</td>
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<tr>
<td>15</td>
<td>94</td>
<td>246</td>
<td>3236</td>
<td>62</td>
</tr>
<tr>
<td>16</td>
<td>128</td>
<td>327</td>
<td>4380</td>
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<td>17</td>
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<td>21</td>
<td>541</td>
<td>1290</td>
<td>19,701</td>
<td>341</td>
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</table>

Week of 2/14 - 2/18 Senior High, Junior High, Elementary Schools
**Week of 2/21 - 2/25 Senior High, Junior High, and Elementary Schools**

<table>
<thead>
<tr>
<th>Field Trips</th>
<th>Tutoring</th>
<th>Small Group Instruction</th>
<th>Telephone/Visits</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Field Trips</strong></td>
<td><strong>Teachers</strong></td>
<td><strong>Students</strong></td>
<td><strong>Teachers</strong></td>
<td><strong>Students</strong></td>
</tr>
<tr>
<td>21</td>
<td>119</td>
<td>274</td>
<td>4211</td>
<td>61</td>
</tr>
<tr>
<td>22</td>
<td>111</td>
<td>248</td>
<td>3228</td>
<td>73</td>
</tr>
<tr>
<td>23</td>
<td>126</td>
<td>263</td>
<td>4250</td>
<td>41</td>
</tr>
<tr>
<td>24</td>
<td>133</td>
<td>275</td>
<td>4512</td>
<td>48</td>
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<tr>
<td>25</td>
<td>92</td>
<td>232</td>
<td>3712</td>
<td>40</td>
</tr>
<tr>
<td>21</td>
<td>581</td>
<td>1292</td>
<td>20,513</td>
<td>263</td>
</tr>
</tbody>
</table>
"School Without Schools" Bus Information

For the 15 day period February 7 - February 25, 1977

**C.P.S. Buses**

Small Buses - 36 capacity
15 days x 22 buses = 330 bus trips

Large Buses - 66 capacity
12 days x 66 buses = 792 bus trips
3 days x 55 buses = 165 bus trips

**Contract Buses**

Large Buses - 66 capacity
10 days x 15 buses = 150 bus trips

**C.O.T.A.**

Large Buses - 66 capacity
10 days - (varied between 11 to 33 buses) = 285 bus trips

Total Bus Trips = 1722
### Computation of Equivalent School Days for "School Without Schools" Field Trip Operation

<table>
<thead>
<tr>
<th>Program</th>
<th>Hrs. Per Student</th>
<th>Activity</th>
<th>2/7 Hrs.</th>
<th>2/8 Hrs.</th>
<th>2/9 Hrs.</th>
<th>2/10 Hrs.</th>
<th>2/11 Hrs.</th>
<th>Total Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSI</td>
<td>1.5</td>
<td>Science Tours, Demonstration Classes</td>
<td>306</td>
<td>579</td>
<td>1088</td>
<td>1632</td>
<td>1200</td>
<td>1800</td>
</tr>
<tr>
<td>CITY OF COLUMBUS</td>
<td>1.5</td>
<td>Outdoor education classes, Industrial tours, classes in a variety of subjects.</td>
<td>162</td>
<td>243</td>
<td>130</td>
<td>195</td>
<td>797</td>
<td>1195.5</td>
</tr>
<tr>
<td>OHIO HISTORICAL SOCIETY</td>
<td>1.5</td>
<td>Tours of Ohio Historical Museum and Ohio Village.</td>
<td>58</td>
<td>87</td>
<td>115</td>
<td>172.5</td>
<td>414</td>
<td>621</td>
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<tr>
<td>BATTENELLE</td>
<td>1.0</td>
<td>Science Classes</td>
<td>63</td>
<td>63</td>
<td>30</td>
<td>30</td>
<td>161</td>
<td>161</td>
</tr>
<tr>
<td>STATE OF OHIO</td>
<td>1.5</td>
<td>Tours of State Capitol and Offices</td>
<td>111</td>
<td>166.5</td>
<td>144</td>
<td>216</td>
<td>259</td>
<td>388.5</td>
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<tr>
<td>COLUMBUS PUB. LIBRARY</td>
<td>1.5</td>
<td>Classes in use of library, reading, black history, creative writing, tours and discussions of coding, book control, etc.</td>
<td>1339</td>
<td>2008.5</td>
<td>1538</td>
<td>2307</td>
<td>1742</td>
<td>2613</td>
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<tr>
<td>17TH AVENUE LIBRARY</td>
<td>1.5</td>
<td>Tours of business establishments, service organizations, demonstrations.</td>
<td>54</td>
<td>81</td>
<td>55</td>
<td>82.5</td>
<td>127</td>
<td>190.5</td>
</tr>
<tr>
<td>BUSINESS AND SERVICE ORGANIZATIONS</td>
<td>1.5</td>
<td>Tours of business establishments, service organizations, demonstrations.</td>
<td>25</td>
<td>37.5</td>
<td>310</td>
<td>465</td>
<td>220</td>
<td>330</td>
</tr>
<tr>
<td>OHIO STATE UNIVERSITY</td>
<td>1.5</td>
<td>Classes in a variety of subjects, tours of facilities.</td>
<td>66</td>
<td>99</td>
<td>110</td>
<td>165</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>RECREATIONAL ORG.</td>
<td>1.5</td>
<td>Alternate physical education activities, bowling, skating, etc.</td>
<td>186</td>
<td>279</td>
<td>42</td>
<td>63</td>
<td>113</td>
<td>169.5</td>
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<tr>
<td>CULTURAL ORG.</td>
<td>1.5</td>
<td>Ohio Theater Presentations, art gallery, educational movies.</td>
<td>88</td>
<td>132</td>
<td>145</td>
<td>217.5</td>
<td>29</td>
<td>43.5</td>
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<tr>
<td>FRANKLIN COUNTY</td>
<td>2.0</td>
<td>Tours of offices, court observations.</td>
<td>126</td>
<td>252</td>
<td>35</td>
<td>70</td>
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<tr>
<td>U.S. POST OFFICE</td>
<td>1.0</td>
<td>Tours of Post Office facilities</td>
<td>35</td>
<td>35</td>
<td>84</td>
<td>84</td>
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<td>135</td>
</tr>
<tr>
<td>FOOD SERVICE</td>
<td>1.5</td>
<td>Tours of food service processing, sales, packaging firms, demonstrations.</td>
<td>66</td>
<td>99</td>
<td></td>
<td></td>
<td>191</td>
<td>286.5</td>
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<tr>
<td><strong>TOTALS</strong></td>
<td></td>
<td></td>
<td>2062</td>
<td>3061.5</td>
<td>3470</td>
<td>5253</td>
<td>5271</td>
<td>7826</td>
</tr>
</tbody>
</table>

32,125 hours ÷ 96,000 total enrollment = .335 hours per student.

.335 hours per student ÷ 4.5 hours/school day = .074 equivalent school days.
<table>
<thead>
<tr>
<th>Program</th>
<th>Hrs.Per Student</th>
<th>Activity</th>
<th>2/21</th>
<th>2/22</th>
<th>2/23</th>
<th>2/24</th>
<th>2/25</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSI</td>
<td>1.5</td>
<td>Science Tours, Demonstration Classes</td>
<td>1279</td>
<td>1218.5</td>
<td>1110</td>
<td>1665</td>
<td>989</td>
<td>1347</td>
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<tr>
<td>CITY OF COLUMBUS</td>
<td>1.5</td>
<td>Outdoor education classes, Industrial tours, classes in a variety of subjects</td>
<td>620</td>
<td>830</td>
<td>1013</td>
<td>1519.5</td>
<td>1419</td>
<td>2128.5</td>
</tr>
<tr>
<td>OHIO HISTORICAL SOCIETY</td>
<td>1.5</td>
<td>Tours of Ohio Historical Museum and Ohio Village</td>
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<td></td>
<td></td>
<td></td>
<td>981</td>
<td>1471.5</td>
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<tr>
<td>NATURE</td>
<td>1.0</td>
<td>Science Classes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STATE OF OHIO</td>
<td>1.5</td>
<td>Tours of State Capitol and Offices</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COLUMBUS PUB. LIBRARY</td>
<td>1.5</td>
<td>Classes in use of library, reading, black history, creative writing, Tours and discussions of coding, book control, etc.</td>
<td>90</td>
<td>135</td>
<td>145</td>
<td>217.5</td>
<td>209</td>
<td>313.5</td>
</tr>
<tr>
<td>17TH AVENUE LIBRARY</td>
<td>1.5</td>
<td>Tours of business establishments, service organizations, demonstrations</td>
<td>401</td>
<td>601.5</td>
<td>723</td>
<td>1084.5</td>
<td>912</td>
<td>1368</td>
</tr>
<tr>
<td>BUSINESS AND SERVICE ORGANIZATIONS</td>
<td>1.5</td>
<td>Tours of business establishments, service organizations, demonstrations, Classes in a variety of subjects, tours of facilities.</td>
<td>437</td>
<td>655.5</td>
<td>371</td>
<td>556.5</td>
<td>301</td>
<td>451.5</td>
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<tr>
<td>OHIO STATE UNIVERSITY</td>
<td>1.5</td>
<td>Alternate physical education activities, bowling, skating, etc.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RECREATIONAL ORG.</td>
<td>1.5</td>
<td>Ohio. Theater Presentations, art gallery, educational movies.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>CULTURAL ORG.</td>
<td>1.5</td>
<td>Tours of offices, court observations</td>
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<td>2383.5</td>
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<td>586.5</td>
<td>589</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>U.S. POST OFFICE</td>
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<td>Tours of Post Office facilities</td>
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<td></td>
<td>90</td>
<td>90</td>
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<td>Tours of food service processing, sales, packaging films, demonstrations</td>
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<td>823.5</td>
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<td>429</td>
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<td>1.5</td>
<td></td>
<td>334</td>
<td>501</td>
<td>400</td>
<td>600</td>
<td>300</td>
<td>450</td>
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<td>9845.5</td>
<td>9051</td>
<td>13350.5</td>
<td>8854</td>
<td>1074.5</td>
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</table>

41,416 hours ÷ 96,000 total enrollment = .451 hours per student.

.451 hours per student ÷ 4.5 hours/school day = .096 equivalent school days.
### Computation of Equivalent School Days for "School Without Schools" Field Trip Operation

**CITY OF COLUMBUS PUBLIC SCHOOLS**
**DIVISION OF ADMINISTRATION**

#### Number of Students and Hours of Participation

<table>
<thead>
<tr>
<th>Program</th>
<th>Hrs. Per Student</th>
<th>Activity</th>
<th>Stu. Hrs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>COSI</td>
<td>1.5</td>
<td>Science Tours, Demonstration Classes, Industrial tours, classes in a variety of subjects</td>
<td>1138</td>
</tr>
<tr>
<td>CITY OF COLUMBUS</td>
<td>1.5</td>
<td>Tours of Ohio Historical Museum and Ohio Village</td>
<td>750</td>
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<tr>
<td>OHIO HISTORICAL/SOCIETY</td>
<td>1.5</td>
<td></td>
<td>706</td>
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<td>DRIELLE</td>
<td>1.0</td>
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<td>STATE OF OHIO</td>
<td>1.5</td>
<td>Tours of State Capitol and Offices</td>
<td>317</td>
</tr>
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<td>COLUMBUS PUB. LIBRARY</td>
<td>1.5</td>
<td>Classes in use of Library, reading, black history, creative writing</td>
<td>2045</td>
</tr>
<tr>
<td>17TH AVENUE LIBRARY</td>
<td>1.5</td>
<td>Tours of business establishments, service organizations, demonstrations.</td>
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<td>Ohio Theater Presentations, art gallery, educational movies.</td>
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54,434 hours ÷ 96,000 total enrollment = .567 hours per student

.567 hours per student ÷ 4.5 hours/school day = .126 equivalent school days

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<td>Ohio Hist. Soc., Ohio Village</td>
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<td>Ohio Hist. Soc.</td>
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<td>Tours, science classes</td>
<td>Main Library &amp; 15 branch libraries in city of Columbus</td>
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<td>Tours, State Office &amp; Legislature Visits</td>
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<td>Tours, classes, demonstrations</td>
<td>OSU, 200 classes, program, tours</td>
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| TOTALS              | 4111| 6884| 8387| 7653| 9664| 8917| 8664| 463| 2371| 3376| 363 | 2603| 2243| 1294 | 99767 |

405
Education On Air

Columbus area radio and television stations have turned over large blocks of their broadcasting time for the use of educators during the time schools are closed because of the fuel shortage.

The programs are designed to keep students in touch with lessons and to supplement the instruction students will get during weekly class time and at other times they meet with their teachers.

Teachers have been encouraged to follow up the daily programs with their students with whatever drill or testing they find helpful. The stations and educational programs are:

**WBNS-TV**

Channel 10
7:30 a.m. Beginning Reading — Lions, Tigers, Dinosaurs
8:00 a.m. Reading—Rainbows
8:15 a.m. Reading—Secrets
8:25 a.m. Reading—Rewards
8:45 a.m. Reading—Panoramas and Piastas
9:00 a.m. Reading—Kaleidoscope, Images, Galaxies
9:15 a.m. Special Education For Basic Living Skills
9:30 a.m. Fine and Performing Arts
9:45 a.m. Junior High Grammar and Composition
10:00 a.m. General Science and Algebra
10:15 a.m. General Math for Secondary Students
10:30 a.m. American History and Government
10:45 a.m. Senior High Grammar and Composition
11:00 a.m. World History for Secondary Students
11:15 a.m. to 11:30 a.m. Biology and Geometry

**WOSU-TV**

CHANNEL 34
8:15 Short Story Showcase Sr. Hi — English, Reviews and segments of Hamlet, Much Ado About Nothing, and Ofelio.
8:45 Community Of Living Things Jr. Hi — Science. Biology data can be analyzed through field trips and microphotography.
9:20 Wordsmith Int. — Language Arts. Language development through listening, speaking, reading, and writing.
9:35 Ripplies K-Pri — Health. Encounters shown to develop a child's feelings, values and ability to cope.
10:00 Process And Proof 6 — Science. Investigation and development of solutions to the problems of conservation.
10:20 Science Is Searching K-Pri — Science. Discovery of fossils, dinosaurs, the moon, and animal eggs, by kindergarten and first graders.
10:45 Science Room Int — Science. Content based on physics, chemistry, and earth science for middle graders.
11:00 Electric Company — Language Arts. Aimed toward the 7-10 year old to develop sounds, reading and spelling.
11:30 Sesame Street — Language Arts. Aimed toward the pre-school and primary grade children to develop sounds, reading and spelling.
12:00 Guten Tag Sec — German: An enrichment course of conversational German for first year German students.
12:45 Self, Inc. Int-Jr Hi — Physical Education. Physical fitness developed in your living room.
1:00 Enjoying Art — Art. February creative art through monoprints, Valentine painting, clay and a birthday party.
1:15 Exploring Art 3 — Art. Shape, space, line, color and sculpture is emphasized.
1:30 Ripplies K-Pri (R) — Health. Helping a child develop values, feelings and ability to cope.
1:45 Tyger, Tyger Int — Language Arts. Creative writing skills in imagery, poetry, drama, limerick and stories.
2:00 Roomastics K-Pri — Physical Education. Physical fitness developed in your living room.
2:15 Stories of America Pri — Social Studies. Entertaining and informative stories of America's past.
2:30 Other Families, Other Families Jr. Hi — Sociology. Field trips to other families around the world.
2:45 Self, Inc. Int-Jr Hi — Health. Question, and problems that will help the 11 to 13 year old during physical and social changes.
3:00 Mathilicious — Math. Fun to learn activities to teach good nutrition.
3:30 Home Room — Special messages for teachers relating to COETV programs and other Central Ohio educational information.

**Radio WCBE**

90.5 F.M.
9:00 Kdgtn.-First — Language Arts and Math
9:30 Second Grade — Language Arts and Math
10:00 a.m. Third Grade — Language Arts and Math
10:30 Fourth Grade — Language Arts and Math
11:00 Fifth Grade — Language Arts and Math
11:30 Sixth Grade — Language Arts and Math
12:00 Fine and Performing Arts
12:30 Spanish
1:00 Current Issues for Secondary Students
1:15 Senior High Grammar and Usage
1:45 to 2:00 Senior High Literature

**Tips To Parent**

Establish a daily routine with your children during the "School Without Schools" program. The schedule can be flexible, but it should include regular times to do school work. Don't let your children put off school work until evening.

Listen to or watch some of the radio and TV programs with your children if you can.

Read the special educational section in the newspapers and encourage your child to do some activities at his or her level.
COLUMBUS, Ohio, Feb. 6—With the public and parochial schools closed here for the next month because of the natural gas shortage, pupils will be offered instruction tomorrow on television and radio, in newspaper pages and university classes and, for the handy, outdoors.

Television programs such as "Captain Kangaroo" and "The Price Is Right" will be canceled for four hours daily on WBNS-TV; The Columbus Dispatch will print two pages of lessons and tests; high school seniors and juniors will be invited to Ohio State University, and city recreation aides will offer such courses as "outdoor survival."

"We have asked for a creative response to keep education alive for the duration," the Superintendent of Schools, John Ellis, said. "The community response has overwhelmed us."

About 95,000 public and 16,000 parochial school pupils were affected by the closing of the Columbus schools on Friday. Perhaps 70 percent of the schools in the state, will be closed for varying periods over the next month because of the gas shortage. But no other city has been as hard-hit as Columbus and none has reported such a broad range of substitute educational activity.

The entire teaching staff has been encouraged to use "any creative method they can find to maintain contact with their students." Dr. Ellis said.

One teacher plans to use her camper for giving reading lessons, others will tutor by telephone; some have planned small group sessions in space made available by restaurants. A motel has offered six rooms for use by the public and parochial schools, and banks have offered their conference rooms.

"We aren't going to send the truant officer after people who don't participate," Dr. Ellis said in an open letter to parents. "We don't have time for that. We expect participation and strongly encourage it, but you are the real loser if you sit on the sidelines. We also expect good discipline. We don't have time to beg anyone to behave, and if students cause problems, they will be quickly excluded."

The bulk of the emergency program, called "School Without School," will be on television and radio. The television programming is from 7:30 to 11:30 A.M., beginning with lessons for first graders and ending with biology and geometry for upper classes. Programs on WBNS radio and on other commercial and educational stations will cover the hours from then until 3:30 P.M., the normal school closing time.

Students at each grade level will check newspapers for listings of the programs intended for their respective age groups. For example, the 515 A.M. Monday program of 15 minutes, titled "Reading Secrets," is listed as "Reading Secrets." Secrets is the name of the text used by third graders.

School officials are stressing that the intention is to maintain pace with fundamentals. Educational television stations operated by the school board and Ohio State University will supplement these basics with enrichment programs.

About 420 persons will participate in the television programs, comprising the personnel needed in front of the cameras as well as those behind the scenes.

"What is unique is when commercial television offers four hours a day of free time," Dr. Ellis said. "Parents don't know what has happened when the schools appeared imminent, he received a call from Eugene D'Angelo, general manager of WBNS-TV, the local CBS affiliate, offering free time in the event of closings. Dr. Ellis said the community's five other commercial stations also have offered two or three hours, he commented, but there are no firm plans now to use this time.

Free TV Time Offered

He said that on Jan. 26, when the thermometer was hovering at 10 below zero, Gov. James A. Rhodes declared a crisis and the closing of the schools appeared imminent, he received a call from Eugene D'Angelo, general manager of WBNS-TV, the local CBS affiliate, offering free time in the event of closings. Dr. Ellis said a dozen school officials began planning with the station's personnel the same day.

Mr. D'Angelo said the station's estimated loss for time turned over to the schools would be about $100,000. This results from lost network revenue, the scrapping of commercial production and loss of new advertisers.

In negotiating with the public and parochial schools for free time, Mr. D'Angelo said he insisted on "mandatory viewing." A station spokesman explained that this meant that teachers would give tests to students and check at least one day each week that television assignments were being carried out.

Thirty-seven of Columbus's 167 schools that use sources of energy other than natural gas will remain open for one-week meetings of teachers and students. Students will be assignments and to go over material taught on television.

Ohio State University, which has more than 50,000 students, remains open because it uses alternative sources of energy. University officials are inviting Columbus high school juniors and seniors to attend classes on a seats-available basis. They are also opening libraries on the campus to high school students.

Recreation Courses

The city's Mayor, Tom Moody, has directed recreation officials to work with the school system in devising a variety of short courses and field trips. Tomorrow, such courses as "outdoor survival," "nature study and interpretation" and "forestry and arboriculture" will begin.

The Columbus Dispatch is donating a two-page daily section containing lessons, printed assignments, tests and other information prepared by the State Education Department.

Battelle Memorial Institute, the international research organization whose headquarters are here, is offering its staff of scientists for lectures to high school students. Battelle is involved in varied research, including coal gasification studies and energy conservation.

Dr. Ellis expects a side benefit accruing to adults.

"Most adults do not know what happens in schools," he said. "Parents don't know how we teach reading, math or English. This will provide an excellent opportunity for parents to know what is being taught. And it will help parents learn how to help their students."

COLUMBUS, Its Schools Shut, Turns to Teaching Over TV

NEW YORK TIMES

2/7/77
General Assembly OKs Funds For Field Trips

The Ohio General Assembly overwhelmingly passed legislation Thursday aimed at allowing Columbus education officials to use $481,650 in federal funds to provide field trips for students while city schools are closed.

The assembly's action came when the Ohio Senate approved the legislation (House Bill 176) Thursday by a 31-0 vote. The House passed the bill last week.

THE EMERGENCY BILL was forwarded to Gov. James A. Rhodes, who said he will sign it.

State Sen. Robert O'Shaughnessy, D-Columbus, a sponsor of the measure, said the bill will allow local school officials to waive lengthy reporting regulations required by the U.S. Department of Health, Education and Welfare (HEW).

The HEW funds will be used to provide trips to museums, government buildings, Ohio Historical Society, Columbus Zoo and other cultural and educational facilities, O'Shaughnessy said.

FROM 5,000 TO 10,000 Columbus students will participate in the field trip program. The funds will be used to hire 100 COTA buses and pay for admission tickets to educational facilities.

Twenty-two Columbus recreation centers, settlement houses, YMCAs and churches will participate in the program.

In other legislative action, the Senate passed legislation (House Bill 164) that would allow officials of state mental hospitals an additional 3½ months to review the conditions of mental patients.

UNDER A LAW enacted last April, mental patients could demand to be released from state hospitals Tuesday if examinations into their mental competence have not yet been reviewed.

The 1976 law required mental condition reviews to be made on all patients in state hospitals by Feb. 22, said Sen. John T. McCormack, D- Euclid, a sponsor of the measure.

But hospital officials have found the deadline impossible to meet, McCormack explained. Without passage of the emergency bill, McCormack added, the state would be forced to release thousands of mental patients if the patients requested to be freed from state facilities.

MEANWHILE, THE HOUSE passed a bill allowing the State Controlling Board to require certain state agencies to return money to the Emergency Fund.

The seven-member board fears there will not be enough cash in the emergency fund to pay for disaster relief programs undertaken in the wake of recent blizzards and severely cold weather.

The legislation (House Bill 186) passed by an 85-0 vote. It will now be considered by the Senate.

DISPATCH
2/18/77
Community effort tells in crisis

By PATRICIA KERN

The doors swung shut on most schools in Columbus last weekend, not to open again until at least Monday, Mar. 7.

But while the traditional concept of school was left behind “School Without Schoolings,”--as the Columbus Public Schools dubbed their substitute program--opened on Monday in movie theaters, fire houses, private homes and bank lobbies. Parochial school classes were housed in much the same kind of facilities, while also using rectory and convent space where possible.

On Friday, Feb. 11, Dr. John Ellis, superintendent of Columbus public schools, and Father David Sorohan, superintendent of the diocese’s schools, held a joint press-conference during which they bestowed accolades upon one another.

ELLIS STRESSED that the two systems “enjoy true cooperation,” and called up the entire community to rally behind “this joint effort of community learning.”

Both school systems, are working on split class or split-day schedules. Some classes meet formally with teachers once or twice a week, while others gather at a central location once a week to get assignments and turn in completed homework.

BACKGROUND ON CLOSINGS

Though there was speculation that the Columbus public schools would probably have to close in February for a period of time, final word was not given the system until Jan. 26, at which time Dr. Ellis was informed that an 85 percent gas curtailment would go into effect February 1.

It came as “staggering news,” according to Father Sorohan, when Columbus Gas of Ohio informed him on Friday, Feb. 28 that all schools would also be closed 83 percent.

COLUMBUS DIOCESAN schools and church-related facilities had voluntarily conserved gas for the past two years—keeping thermostats at 65 at all times. All gas within the system was pooled, and schools were well within their allotment. However, Columbus Gas, labeling the dwindling gas supply in Columbus a “fuel crisis,” dictated that the Columbus parochial schools would be allowed only minimal maintenance level heat of 55 degrees.

A plan to use five Columbus Catholic high school buildings as feeder schools fell on Monday, Jan 31 when the school office received word they must also close. But, as Father Sorohan pointed out, “When it’s put to you that you are depriving residential users of gas by staying open, you have no choice anyway.”

TV CLASSES

When the public schools announced their closing WINS-TV (Chan. 10) stepped forth with an offer of air time. Following their lead, the PBS station, WOSU-TV (Chan. 31) and the two other educational TV stations, WCMH (Chan. 4) and WTQN (Chan. 6) offered free-learning time to both public and parochial schools. The public school’s own radio station, WCBE, had already made plans to step-up activity and WINS radio volunteered more time.

ONE CONCRETE parochial school TV program got off the ground just this Wednesday on WTQN-TV (Chan. 6). Diocesan school personnel and the Diocesan Television-Had Radio Service office, under producer Father Tom Farley, are airing a live daily religious education program, “Something Special,” for one hour Mondays through Fridays, until Feb. 25. A story about the program appears in the television-radio column on page 16 of this week’s issue of The Catholic Times.

COMMUNITY SUPPORT

Drs. Ellis and Sorohan have expressed deep gratitude for the generosity of the community in opening homes and establishments for public use.

The diocesan school office reports that besides using, parish rectories and convents, some classes are in more ingenious settings.

Watterson high school is meeting in the twin theaters at Graceland Cinema; Reynoldsburg St. Pius is using Messiah Lutheran church; St. Andrew’s: Battelle and Riverside Hospitals; Wehrle high school is using Indian Mound recreation center and Our Lady of Perpetual Help is in the Grove City K of C Hall.

EACH PRINCIPAL is making bus arrangements where feasible, but when a school is spread out in several facilities, such transportation becomes an impossibility. For instance, Westerville St. Paul is using five locations, including the Fire House, Hub. Federal and private homes.

Further indication of community support comes from businesses and industries, city and state government which are opening their facilities for field trips—to further implement the learning process.

OUTSIDE FRANKLIN COUNTY

Several out of town schools are also adapting to different teaching facilities.

Delaware St. Mary is using Ohio Wesleyan University buildings and has two hours of radio time each evening. Wellston SS. Peter and Paul is in four rooms in the public school. Portsmouth Catholic elementary is meeting in its one building which heats with oil. London St. Patrick is using the public school building facilities while Dover St. Joseph has alternate fuel, and is maintaining classes as usual.

CHILD CARE

United Way agencies in Columbus have established a series of centers to help working parents during the crisis.

THE DIOCESAN CATHOLIC Social Service department (a UW agency) opened a development center for children from kindergarten through sixth grade at St. Aloysius Family Service Center, 35 Midland Ave., on Columbus’s Westside. The Center operates from 8:30 a.m. to 4 p.m., Monday through Friday, with a regular hot school lunch served daily.
Carl Bruner, director of the Family Service Center, is coordinator of the new program, assisted by Joyce Rodgers. Volunteer teachers conduct education programs and enrichment activities throughout the day.

The program is open to all public and parochial school children throughout Franklin County, and can serve up to 200 children. To register call Catholic Social Service at 221-5591, ext. 20.

FOOD STAMP PROGRAMS

With unemployment growing daily as a result of office and industry closings, United Way of Columbus has established four Food Stamp centers where those who qualify can apply for and pick up stamps.

United Way's Jim Sanders said that this program provides a steady flow of food instead of making families dependent of food centers. He did stress, however, that food donations are still being received since they can tide over families until they get on the Food Stamp program.

The program is operating in four areas of Columbus: North—1135 Cleveland Ave.; East—Teamsters Hall, 555 E. Rich St.; South—Local 379 at 1571 Parsons Ave.; and West—St. Aloysius Family Service Center, 35 Midland.

For those unsure of their eligibility, call the State Welfare Department toll-free hotline: 1-800-282-1190.

EMERGENCY ASSISTANCE

An emergency assistance program is also operating at St. Aloysius where those whose utilities have been shut off, or who face eviction, may apply for immediate assistance with the Welfare Department.

Father David Sorohan and Dr. John Eilhys met with the press last Friday to announce the shared effort of the Columbus parochial and public schools in maintaining sound education during the school closings mandated by the fuel crisis.
Doing a half-hour radio program may sound simple but for a veteran teacher it is much more difficult than spending a day in the classroom.

Catherine Wiley, a third grade teacher at Duxbury Park Elementary, is one of three teachers on a team presenting the WCBE-FM radio program for third graders, broadcast at 10 a.m. and 1:30 p.m. daily, during the School Without Schools session.

"It's quite challenging," said Wiley, who has taught for 33 years. "Most people don't realize how much work it is to do a half-hour segment. You have to set up interesting action, without the use of visual aids."

Particularly complicated, Wiley noted, is trying to explain certain math concepts, such as carrying, over the radio. You can't just walk over to the blackboard. You have to do it all with words.

Wiley's team of three teachers is the only all-black team on the WCBE programs. She works with Elaine Bell, a third grade teacher at Cassady Elementary and George Goodrich, a third grade teacher at Scioto Trails Elementary.

The half-hour program covers language arts, mathematics and social studies and is usually set around a theme, such as the cold weather. The team has introduced material about noteworthy blacks such as Matthew Henson, a black explorer who was the first person, other than the Eskimos, to reach the North Pole, and Benjamin Banneker, a free black who was the first person to make a clock in America and the surveyor who laid out the city of Washington, D.C.

Wiley said the group works daily from 8:30 a.m. to 4:30 p.m. to prepare their half-hour scripts. All three participate in each script, trying to interweave the information to make it interesting and conversational.

How do they know there is anyone out there listening?

Wiley said they have asked the students to write in and have gotten a number of responses. One student, responding to a request to write a sentence beginning with "Fortunately," wrote: "Fortunately, we didn't have school and we missed our Valentine's Party."

"But fortunately, I didn't have to write out all those dumb names to send valentines to."
Ellis to take top U.S. education post

Superintendent John Ellis has announced he will be leaving Columbus to take a top job in the United States Office of Education. Here is the complete text of his statement issued on February 17.

"I have been asked to accept the position of Deputy Executive Commissioner of Education in the United States Office of Education. It is an important post in which one can contribute to education throughout the entire nation. After agonizing reflection, I have decided to accept the risks and the challenges of the new position.

"The Commissioner of Education-designate, Dr. Ernest Boyer, former Chancellor, State University of New York, is a brilliant educator with outstanding human qualities. I am looking forward to working with him.

"I did not seek a position in Washington, nor did I expect one. Columbus is a beautiful city, and my family and I have thoroughly enjoyed living here and working here. The cooperation and friendliness we find in Columbus make us feel right at home.

"It is, therefore, with deep regret that I consider leaving the community. There is no good time to leave one set of responsibilities and begin another. This time is no exception.

"One of my most important considerations was whether I would be unfair to the Columbus schools by leaving now. There were major problems when I came to the district. Many were solved, others developed, and some remain. Finance and the desegregation court case are the two most pressing matters that need resolution now. I have confidence that the community will handle these issues in an exemplary manner. We have an excellent school system that has made solid progress in extremely difficult times.

"The Board of Education will have an opportunity to appoint another Superintendent whose tenure can extend through the next critical period. I will work with the Board of Education to establish a departing date that maintains progress. The offer, of course, is subject to the approval of the Civil Service Commission in Washington and the Columbus Board of Education.

"I have complete confidence in the Columbus staff and the teamwork that has been established. We are blessed with large numbers of competent and dedicated people.

"I express my deep appreciation to the Columbus Board of Education, the administrators, teachers, staff and students of the Columbus Public Schools, and to the citizens of Columbus for the privilege of working with you. The cooperation has been outstanding, and I shall always remember with deep affection this beautiful community and its wonderful people."

Hard work, creativity keeps learning alive in Columbus

There were skeptics who said it couldn't be done. They asked how 96,700 children could go to school in only 33 buildings. They argued that bus schedules couldn't be worked out, that teachers wouldn't be able to maintain contact with pupils, that parents wouldn't do their part, and that attendance would plunge. The skeptics were wrong. Hard work, creativity and unprecedented cooperation by every segment of the community is keeping learning alive in Columbus despite the fact that 150 schools are closed for a month due to the natural gas shortage. Pictured here and on the back page of this issue are a cross-section of the activities that have focused nation-wide attention on Columbus Schools.

Getting last minute instructions before the opening of School Without Schools television broadcasts, about 100 Columbus teachers who serve as writers, producers and presenters assembled in the WXNS TV studio where they watched a trial run (left) and got a step-tap from John Crawford (front), Fort Hayes radio-TV teacher. MORE PICTURES ON BACK PAGE
Bus drivers are ‘unsung heroes’ in School Without Schools

“The bus drivers have been making the whole system possible,” according to Sally Arnold, transportation supervisor, who has been in radio contact with drivers from the School Without Schools Operation Center at 270 East State Street. “The drivers have gone out of their way” to complete regular school-to-school runs, plus running neighborhood routes and field trips to about 150 new sites, she said.

During the School Without Schools program, about 180 buses have been running almost constantly from 7:00 a.m. to 4:30 p.m. each day. Many of the bus drivers have never been to some of the schools and while there have been a few momentarily lost drivers, they have met all of the schedules with a minimum number of late buses, Arnold said.

By the end of the first week, more than 90% of the schools had called the Operation Center for field trip transportation. Some bus drivers have been working without a lunch break, running a regular bus route and two field trips in one day. “These bus drivers have made a lot of sacrifices so that the children in Columbus can continue their education,” Arnold added.

The transportation problem was given a big boost when Columbus City Council approved a $25,000 grant making about 40 COTA buses available for field trips. Within one day of receiving the badly needed bus service, more than 60 percent of the seats for the ten-day period had already been booked.

Each principal has a complete listing of field trip opportunities and requests must be placed through the principal’s office. Most City of Columbus tours and recreation centers have been heavily booked, but many classes offered by the City and by Ohio State University are still available. Some afternoon times are open for COSI, the Ohio Historical Society and the Columbus Zoo. All requests must be scheduled by 4 p.m., two days prior to the field trip date.

Teachers find new ways to maintain pupil contact

When School Without Schools was still on the drawing board, planners agreed to keep administrative “red tape” at a minimum and to place the highest priority on helping teachers maintain daily contact with their students. Many schools, especially at the elementary level, have been able to accomplish this by simply relocating in private homes, churches, businesses, libraries, recreation centers, and other non-school facilities.

Many other teachers have come up with some very unusual ways to maintain daily contact with pupils. Here are a few examples:

- Elaine McCormick, Starling Junior High teacher, put “Have Math, Will Travel” signs on her car and drove around the neighborhood offering curb-side lessons. She stays in contact with Starling’s relocated office at West High School using a radio converter installed in her car for the duration. Carrying textbooks and extra practice sheets on her teaching expedition, she has found good response from many of her 180 students who need personal help.

- Teachers at Yorktown Junior High are using a telephone hot line operated by the student council. Students who wish to contact teachers about lessons can call the line. Teachers are also asking student council members to relay information about field trips and other learning activities.

- Mifflin’s Homework Hotline, which went into operation last fall and attracted nationwide attention, is proving to be a valuable link between teachers and pupils. A three-minute recorded message is packed with information about transportation, field trips, basketball games, grade cards, media schedules and assignments.

- Margery Morris is making visits to the homes of each of her 60 Indian Springs kindergartners.

- Beth Sherrod, primary EMR teacher at Fairmoor, has scheduled each of her students for a 15-minute telephone lesson every day. She uses a variety of techniques during the phone sessions, sometimes asking the children to read, have a spelling check or a question and answer period.

- Imogene Nielsen, South High guidance counselor, is tutoring five foreign students daily in the home of one of the students. When she discovered that none of the five had ever visited points of interest in downtown Columbus, she arranged for a tour of the State House and City Hall.
Daily bulletins aired by WCBE

School Without Schools announcements are being aired at 3:30 p.m. daily over WCBE Radio (90.5 on the FM dial). Since this is the only channel of immediate communication with all employees, staff members are urged to listen during this period of crisis.

Classified payroll schedule revised

With all schools closed for "spring break," February 28 through March 4, the payroll schedule for classified personnel has been revised. Checks will be available on March 2 at the Education Center, 270 E. State Street, or delivered to regular locations on March 7.

Columbus Plan process delayed

The fuel crisis has caused a delay in the annual Columbus Plan recruitment drive. The first day for accepting applications has been moved from March 1 to March 14.

According to Nnorval Goss, director of pupil personnel, Columbus Plan administrative manuals for the 1977-78 school year will be distributed after regular school resumes on March 7. Application forms will be available for students and parents in each school office on March 14, he said.

Calendar changes adopted for schools, central office

Calendar changes for the remainder of the 1976-77 school year have been worked out with employee groups and formally adopted by the Board of Education.

The School Without Schools program will operate through February 25. Spring break has been rescheduled for the week of February 28 through March 4.

Regular school will resume on March 7. The school year is expected to end on June 16 for students and June 17 for teachers, as previously scheduled. Two holidays retained in the calendar are Good Friday, April 8 and Memorial Day, May 30.

The Education Center and related offices will observe the following revised schedule:
- March 2 - Close at 4 p.m.
- March 3-4 - Closed all day
- April 7 - Close at 4 p.m.
- April 8 - Closed all day

This change affects personnel in the Education Center, Fifth Street Annex, Sixth Street Annex, Adult Education and School Service Center, Health Career Center, Library, Maintenance Center, and Garage. Personnel who work on special assignments, or who have evening or other schedules, should work appropriate schedules as directed by their supervisors.

Meet the president

 irvin Witcher, head custodian at Valley Forge Elementary School, is president of OAPSE Chapter 580, representing about 164 head custodians in Columbus Public Schools. His experiences during the current shut-down are typical of the hard work and concern being displayed by custodians all over the city.

Witcher spends his day going from one end of the building to the other, making checks to see that water is circulating and monitoring room temperatures to prevent damaging freeze-ups.

"It's like a graveyard here. This is a place where you're used to hearing voices all the time." Witcher said. "Now it's like a ghost town."

In addition to guarding the building, Forest Park's custodian said, "We had a lot of snow to move and our plow was broken down." Those kinds of frustrations were shared by many other school custodians, but everyone pitched in to do battle with the worst winter of the century and came up winners.

As President of Chapter 580, Witcher says, "Our main concern is for everyone to do the best job they are capable of doing. Head custodians have to be effective managers and this chapter gives us an opportunity to exchange concerns and work out problems." The group tries to keep abreast of new techniques by inviting outside speakers to their meetings.

Witcher's concern for responsibility and human relations is evidenced by an unusually varied background. He majored in child psychology and is an ordained minister serving the Jerusalem Tabernacle Baptist Church. He is also in the process of writing a book about his experiences and observations over the years.

Other officers of OAPSE Chapter 580 are: Vice-president Willy Artis, Sr., Eastmoor Junior; Secretary Harry Cox, Centennial; Corresponding Secretary Clarence Burrs, Jr., Mohawk; Treasurer Charles Gibbon, Shazon; and Chaplain Clarence Finney, Southeast Career Center.

Music Festival moved to April 29

The Spring Music Festival originally scheduled for April 1, has been re-set for Friday, April 29 at St. John Arena on the Ohio State campus at 8 p.m.
Logo designed by Independence teacher

Art teacher Jeffrey Shaw of Independence Junior-Senior High School was already working overtime, helping prepare visuals for TV programs, when he was asked to come up with a logo for School Without Schools. His icicle-laden one-man show is now appearing in all daily and weekly newspapers and public service television announcements.

Don Davis, shifted from his usual job as adult education supervisor to a temporary assignment in the School Without Schools Operation Center, works with a team of central administrators to coordinate field trip bookings.

Fourteen phones in the Operation Center rang off the hook with requests for transportation, facilities and information. From left to right, Hilda Bess, Dick Beck and Charles Newman help keep things running smoothly.

Classroom teachers became instant TV stars broadcasting lessons on all three local channels. WBNS-TV producer Al Dompke (left) coaches teachers Brenda Conard, Diane O'Shaughnessy, Sylvia Thompson, Mary Fried and Charles Lewis.

A crew of talented art teachers is working behind the scenes to produce visuals for several hours of television programs daily. Bruce Bishop (left), Franklin Junior High, discusses his work with art supervisor Martin Russell.

Vocal music teacher Thurman Davis (above) found space for homebound students to rehearse at the Karl Road Baptist Church.

Un-school places for displaced students and teachers included the Van Dyne-Crosley plant where Smith Road teacher Patty Mills worked with third graders.

Preparing scripts for some of the many radio lessons aired daily on WBNS and WCBE-FM are (left to right): Patty Asbeck, Karen Dauer, Clint Hickman and Alberta Myers.

Teachers and students from Oakland Park and Stewart Traditional Schools plan to continue the friendships they have formed through sharing one building during the fuel crisis. Pictured above is Oakland's pre-K teacher Hapie Jackson in a School Without Schools session.

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Official publication of COLUMBUS PUBLIC SCHOOLS
270 E. State Street
Dr. John Ellis, Superintendent
Beverly Bowen, Public Information Director
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D. To identify effects of the School Without Schools Program

Information pertaining to the effects of the Program has been provided, in part, in Chapter III of this report. Further observations and newspaper reports related to effects of the program are contained on the following pages. Readers wanting to skip the remaining compilation of information in this section could move to page .

Effects considered noteworthy by the principal investigators include:

1. Benefits received by students were highly variable as was level of involvement. Students who wanted to could and did make use of many opportunities that were usually unavailable under normal conditions.

2. School personnel following the crisis returned to business as usual. They did benefit from increased awareness of the regular instructional program by parents and voters, but few changes in usual behaviors within the organization resulted. It is important to note that the school administration came out of the crisis with an exceptionally positive image throughout the community when the potential for failure and negative reactions was high.

3. The program kept students thinking about school tasks over the four week period, although the involvement of some was minimal. As several teachers reported, at least it was better than coming back after Summer or Christmas vacation.

4. The program did not have a noticeable effect on the school budget, considering the fact that salary and benefits costs which comprise 87% of the budget were kept constant.

5. Students and teachers agreed that one day per week in school and homework were the two most effective instructional strategies used during the Program.

6. Implementation of the Program during February 1977, while successful, reduced the chances of ever doing it again in the same way in Columbus successfully. This time it was an emergency and everyone pitched in; next time the community will question the planning capability of the school administration.

7. The Columbia Gas Co. has received considerable pressure from the government to prepare for possible extreme needs of its consumers in the future.
BUSING COMES TO COLUMBUS

HERE COMES THE BUS
-- WITHOUT A FUSS!
HERE WE GO. A school bus driver watches the traffic and keeps an eye on the children en route to the site where Douglas Elementary School students will have classes for the day. The students are well provided for with school materials and a lunch. (STAFF PHOTO BY ROB BUSBY)

SCHOOL’S IN—Columbus area students are being bused to local businesses for classes due to the shutdown. Douglas Elementary School students are divided between Ohio National Bank and the downtown YWCA. (STAFF PHOTO BY ROB BUSBY)

Virginia Prentice called "one of the most exciting adventures this city could have."
The superintendent called it "one of the most dramatic efforts in the country."
Walter Cronkite’s Evening News spent the week covering it, and it was carried on the Today Show, Barbara Walters’ evening news program and the front page of the New York Times.

It was the most massive school busing effort the city of Columbus had seen the School Without Schools program, yet it went into motion with the full support of the city’s staunchest busing opponents.

The program began Monday, transporting entire school populations for their one-day-per-week sessions at school buildings that use fuels other than gas.

By the end of the week, students from a total of 8 schools would be transported to another building. School officials estimate approximately 7,500 students per day would be transported, a total of 37,500 per week, more than one-third of the school system’s student population.

At the Columbus Board of Education’s committee of-the-whole meeting on Tuesday, the Schools Without Schools program received its most enthusiastic praise from the white board members, all of whom have taken strong positions against busing.

"I was proud of Columbus before, but I’m prouder now," said Marilyn Redden.

"I’ve never seen so much creativity," she commented, referring to the radio and TV programs. "I’ve been astounded."

Redden said she was surprised they were able to transport the kindergarten students, adding, "I can’t believe what you’re able to do with this transportation maze."

Virginia Prentice said...
she had been hearing from parents and business community and commented: "Through adversity, we've picked up something really fine."

Board president M. Steven Boley also expressed enthusiasm about the creativity that was emerging as a result of the program:

"When black board member Dr. David Hamlet asked if any of the parents or children were complaining about busing, Dr. Watson Walker volunteered that "nobody complains about busing unless it's for racial balance."

Supt. John Ellis said he had had no complaints about the busing, but Redden said she had had a couple of questions about it.

Following a report that attendance on Monday was 68 percent at the elementary level and 82 percent at the secondary level, Walker asked what happened at Marion-Franklin, where attendance was only 48 percent.

Told that the analysis had not been completed, Walker suggested that an effort be made to prevent a recurrence.

A school official had earlier told the CALL-POST that the low attendance may have been the result of a rumor that was circulated that attendance was optional. In a separate interview, Walker told The CALL-POST he thought the School Without Schools program was going well, but there were areas where he has some concerns and wants to learn more about what is going on.

"The rich and middle classes get the maximum thrust," in these kinds of programs, he said. "The lower economic groups get the tail end."

He noted that he had seen photographs of teachers in homes in the north end, and that these opportunities are not available in ghetto areas.

LISTENING LAB - Enjoying Innis-Elementary School audio equipment are Casady first graders, left to right: Trina Jenkins, Eric White, Michael Jacobs and Aaron Dooley. Helping out are Casady teacher Ellen Stephens and principal Donald Gales.

HERE COMES THE BUS - Students from Brookhaven High School, 4077 Karl Rd., arrive bright and early at Linden-McKinley High School, for their day of classes. Students from all over the city are participating in the "School Without Schools Program." Entire school populations are transported for one-day-per-week classes at school buildings that use fuels other than gas. (STAFF PHOTO BY ROB BUSBY)
THUMBS UP—Students from Douglas Elementary School give the OK sign aboard a school bus that transported them to BankOhio National Bank, 150 E. Broad St., for classes on Tuesday. (STAFF PHOTO BY ROB BUSBY)

CASADY AT INNIN—Cassady Elementary School students enjoy the brand new facilities at Innis Elementary during their weekly day-care sessions with the School Without Schools program. (DEN CHANDLER PHOTO)
Ellis gives high marks to 'School Without Schools'

BY CHARLES FENTON
Citizen-Journal Staff Writer

The entire staff of Columbus Public Schools deserves an "A-plus" for its enthusiastic production of the "School Without Schools" program, Supt. John Ellis told the Board of Education Tuesday.

Teachers have been "superb," support personnel are doing an "excellent" job, and — most important — students and their parents are "happy" with the emergency project, Ellis reported.

ONE SIGN OF THE program's success is attendance at once-a-week classes in the 36 district buildings which remain open because they are heated with fuels other than gas, another administrator noted.

Attendance Tuesday was 36.4 per cent for elementary students and 82.1 per cent for secondary students, among those scheduled to attend at alternate schools, said Edwin J. Tilton, assistant superintendent for administration.

"Those figures would be good if conditions were normal," Tilton said. "But you must remember that temperatures set a record low in Columbus of 13 below zero Tuesday morning."

CHARLES C. HALL, assistant superintendent for Business affairs, reported the complex transportation network set up to move students to alternate schools was working well, despite the weather.

"One of the best things about this situation is that the bus drivers are running hundreds of field trips," he said.

Donald Davis, a supervisor in charge of the field trips, reported 45,779 of the district's 96,000 students have been booked for tours, so far.

"WE HAVE FILLED the Center of Science and Industry every day," Davis said. "And we are afraid the animals at the petting zoo are going to be petted to death."

Ohio State University has agreed to open up 150 classes in a variety of subjects to Columbus students temporarily out of school due to the gas crisis, he said.

Teams of teachers preparing more than 40 daily broadcast lessons are receiving "excellent" support from regular staff at stations WBNS and WCBE, said Evelyn Luckey, executive director of elementary education.

The broadcast courses combine basic skills and "enrichment" in a wide range of subjects, she said.

BOARD MEMBER Marilyn Redden, who praised the quality of the broadcasts, said she has watched them herself since they started Monday.

"I have never seen such creativity before," Mrs. Redden said. "Even Dr. Ellis was so happy on this morning... being measured metrically in a math lesson."

Howard O. Merriman, assistant superintendent for instruction, said he believes Columbus teachers are learning new skills every day from their "School Without Schools" teaching experience.

"Every kind of teaching and learning imaginable is going on in Columbus right now," he said.

BOARD MEMBERS nearly got into another racial fuss when Dr. David D. Hamlar asked the superintendent if any parents or children had complained about the busing involved in the emergency schooling program.

Ellis was well into a typically lengthy reply when Dr. Watson II. Walker interjected: "No one complains about busing unless it is for racial integration."

At that point Mrs. Redden, an avowed foe of busing for racial integration, smoothed the warming issue by saying: "The people of Columbus really want our kids to get a good education, no matter what the circumstances."

Essex To Discuss Energy With Area School Chiefs

Martin W. Essex, state superintendent of public schools, will meet with central Ohio school superintendents to discuss the energy crisis at 7:30 p.m. Thursday at Groveport-Madison High School.

The meeting is one of a series Essex and other state officials have planned with superintendents throughout the state Thursday and Friday.

The officials want to collect facts on the effects of the natural gas shortage for possible new policies or legislation.
Sixth grade students from Reel Avenue Elementary School in Columbus touring mini exhibit at downtown museum

Columbus School Closings Prompt Community Help

By REGINALD STUART
Special to The New York Times

COLUMBUS, Ohio, Feb. 18—At the Glidden paint store on High Street on this city's north side, the shelves are filled with cans of paint and the aisles with elementary school students studying reading and math. Several miles to the east, at the home of Jane Pratt, another group of public school students is in the basement attending a math class.

Downtown, at the Columbus Science Institute, several dozen students and adults are getting a primer's course in coal mining. And at the Imperial Four Hundred Motel, several rooms are being prepared for a special group of guests—school students—who have been holding classes there for four days each week. Meanwhile, throughout the city, thousands of young people and adults are tuned into the commercial television or radio stations for several hours of instruction in math, biology, reading skills, foreign language or art.

"Outpouring of Community Spirit" "The community is exhibiting the greatest outpouring of community spirit since World War II," said John Ellis, the superintendent of the 95,000-student Columbus public school system.

Mr. Ellis's enthusiasm is over the broad community effort to sustain a public education program here until the closing for a month of 143 of the city's 172 public schools. The move was taken by school officials earlier this fall in an effort to conserve natural gas to keep buildings after supplies were tight in this winter's severely cold weather.

Called the "School Without Schools" program, the effort here is designed to be the first of its kind in the nation and involves nearly every segment of the city's business, educational, religious, social and political life.

"We haven't identified a formal way to measure the success of what we've done, but we think in many ways it already is a success," said Mr. Ellis, who this week accepted a post as deputy executive commissioner of the United States Office of Education.

"I think when it's all analyzed," he said, "some children will not have benefited, but most students would have had significant positive new learning experiences that they would not otherwise have had.

"One of the things we teach in school is how to keep on learning after school, and we're having an exercise in that right now," he added.

$25,000 Busing Gift There are several components to the educational effort.

With most public schools closed, all students are required to attend formal classes one day each week at one of the schools still open. Many are busing busses to those schools, as a result of a special $25,000 transportation gift from the city to the school system, which, like all in the state, is an independent school district.

On other days students and teachers were asked to keep in contact with each other as much as possible and have done so by phone, children's-mail, radio, mail...
and by gathering at homes, hotels, restaurants, the cost of making some sets: overtime for places of work must stay upon or are employees...hosted with a fuel other than natural gas.

"I think maybe this is a good break...The three major commercial television for the kids, getting away from the class- stations and several radio stations have..." said Judy A. Manke, whose 9-year-old daughter, Beth Ann, was busy for as much as six hours a day working on main questions in the class to provide teachers with 15-minute ses- sions of air time for class programs.

"But the kids aren't going to school...These are butressed by publication in when others in the other nearby towns...The Columbus Dispatch, the city's morning paper, of at least two pages others are finding natural gas and maybe of school lessons and a schedule of the...Columbus could do more.

classes to be taught on television as well...Robert M. Barth, whose 10-year-old daughter Barbara was in the same class...said he thought the emergency program was "great and working out real well."

The teachers, I think, are being very professional about it," he said.

From a sociological perspective, the school program has worked wonders, many privately say. Dozens of teachers and school administrators who have refused to work together in the past are now working together and with enthusiasm.

The public school system here, which saw its tax-increase proposal rejected by...voters last November, is also getting some needed positive publicity.

"We're getting calls and letters from the other towns," said Thomas L. Rose, a high school math teacher who was parts of the city with no complaints, an preparing for his television math show asset for Columbus, which is expecting to lose a Federal school desegregation order to...$100,000 in revenues by staging the be handed over...possibly next week, that...school shows. It reached that figure based; might require the use of school buses on studio time that would normally be for implementation."
An unprecedented effort
to keep students learning:

School Without Schools

By Karen Foster

On Friday, Feb. 4, the Columbus Public School System closed the doors to its natural gas heated buildings and the public educational system's wheels of normal operation ground to a halt.

But education marches on.

In an "unprecedented community effort to continue education in a time of crisis," the Columbus Board of Education, Superintendent of Schools Dr. John Ellis, teachers, administrators, the local media and the community at large banded together to form "School Without Schools."

"School Without Schools" is the title of the program under which students of all ages will have the opportunity to continue to learn even though their normal learning centers are closed.

The program as many parents now know, is no easy undertaking.

One of the major projects was to arrange the schedules of 191 schools so each would have a chance to meet at least one day a week in one of the system's 33 buildings not heated with natural gas.

In spite of the short time administrators had to prepare for such a project, on Monday, Feb. 7, students like those from Whetstone High School found themselves attending classes in a different environment. Whetstone students will attend classes once a week in the home of their traditional rivals - North High School.

Whetstone principal James Ferguson says he is hopeful that no major problems will arise while his students are guests at North.

While elementary school students usually remain in one classroom for their instruction, high school students are accustomed to changing rooms for each class. Whetstone administrators solved this confusion by giving students maps of the North High building.

Ferguson says he thinks students want to be in classes even if it is only one day a week, since "they've been out so much lately."

But, he emphasizes, "the students will need encouragement to get as much out of the program as they can."

Parents will play a large role in this encouragement. As Dr. Ellis says, "Without their (parent's) help, our whole program would be lost."

"We are depending on parents to play an important role in this whole process, exercising good discipline at home to see that children participate in the activities and complete assignments," Ellis says.

In addition to attending classes once a week, students will receive their lessons via local television and radio stations. Putting together lessons that will be effective for an entire school system is no easy task - especially in the short time teachers had to prepare. But at 7:20 Monday morning the show was on and beginning readers were exposed to "Lions, Tigers, and Dinosaurs," on WBNS-TV.

Programs have been devised for all levels of students and teachers throughout the school system are incorporating these into their own lesson plans.

But the School Without Schools' teaching process doesn't stop with weekly classroom visits or daily media programming.

Educational and recreational facilities throughout the city have offered the use of their facilities to educational groups and school officials are accepting the invitations.

Teachers now have a chance to arrange field trips to such places as the Center of Science and Industry (COSI), the Ohio Historical Society, Battelle Memorial Institute, The Columbus Gallery of Fine Arts, and the Ohio Theatre.

To avoid scheduling too many groups in the same place at the same time, teachers who wish to take advantage of the field trips call into the coordinating center of the School Without Schools program, located in the board Room in the Columbus Board of Education building.

There, a small army of telephone coordinators arrange times and transportation for field trips. The coordinators keep everything in order by means of a large chart that shows which groups are where and when. It's no easy job coordinating field trips for 90,000 pupils, and even days before the program officially began, phones were ringing continuously.

Since the program has been underway for such a short period of time, it is impossible to analyze how it is working. Parents with several school-aged children may find it difficult to arrange convenient time schedules if all the kids have different activities scheduled for the same day.

But, as Dr. Ellis says, "Clearly, we have the most unusual opportunity any city has ever seen. During the next three weeks, an unbelievable array of activities and creative use of time, talent and community resources will keep learning alive in Columbus."
The following study was done to determine how the Day Care Centers in Columbus, Ohio were affected by the School Without Schools program during February, 1977. The hypothesis was that Day Care Centers would be more actively involved in the care and education of school age children.

A random sample of twenty-four of the one hundred centers in the area was selected for interview. Five either chose not to participate, or were unable to provide the information requested. The directors were asked for enrollment information for January, February, and March. A copy of the questionnaire is included.

The tables on the following page show the effects of the crisis on enrollment and personnel changes.

Those centers which served exclusively welfare and lower socio-economic level parents lost children and staff. One of the directors said the drop-in babysitting service stopped completely during February. She suggested that since parents were not working then, there was no need or money for babysitting. She also mentioned that enrollment came back up slowly.

Those who claimed to serve middle and upper middle parents tended to gain more children than they lost. Five centers gained a total of 51, 3 centers lost 26. Of those who served a mixed population, one center gained 5 and 3 together lost 24. In this sample, there was a loss of 179 children and a gain of 150.
Three of the four centers which serve only preschool lost children, suggesting that parents of preschool children found less need for services during this time.

The centers which added personnel serve middle and upper levels. None of those which added teachers were exclusively preschool, and none served only lower socio-economic levels. All of those which added served school age children and middle socio-economic levels. A total of 19 people were added. Two were released.

Day care services experienced a shuffle, with new needs requiring new solutions. The picture that emerges is that parents who were out of work, or whose older children were home, tended to remove preschool children from day care in February. Also, there was a large increase in need for care for school age children.

Older children already enrolled in the centers were there for 7 hours a day longer than usual. Normally, they come early in the morning, are transported to school, and return in the afternoon to wait for their parents to pick them up after work. Centers found it necessary to adjust their programs, room arrangements, and schedules to accommodate these children through the day. Add to these regulars an additional 150 children, and we see the Day Care Centers actively involved in the educational process.

It is difficult to determine the factors which caused the expansion of some centers and not others. One director, anticipating the need, placed a large ad in the paper. She had room for 100 children, but received no response. Another director said she
offered space to the school system, but no one used it. She decided this indicated the laziness of the teachers in that system.

Some comments which color this picture:
- "It was crowded."
- "Tough on the center."
- "Hated it!"
- "Expensive."
- "More interruptions."
- "Hampered the preschool."

One busy director concluded in exasperation, "To top it all off, nobody was getting sick!"
Looking for child care?

Babysitting? Tutoring?

Use this free Booster service

While children are out of school, many working parents are suddenly faced with child care problems. As a public service, The Booster has opened up, at no charge, its classified advertising section to persons who are willing to babysit, who need babysitting services, and persons offering tutoring services.

This week, over fifty individuals and groups have responded. The Booster hopes that this service will be useful to the community.

These ads will run every Wednesday, as is, until Columbus Public Schools reopen, unless the Booster is notified by the placer.

### BABY SITTING

| Baby sitting weekdays, 1 bl. from Crestview, any age. Experienced. Call mornings 262-6420. |
| Will babysit in Clintonville area. Have exper. and recom. 262-4093. |
| Ex-pre school teacher & mother will babysit, my home while schools are closed. Colonial Hills Area. (Worthington) 268.2500. |
| High school student will babysit in Crestview school area. Reasonable rates. 263-9432. |
| Columbus teacher will watch children while out of school & will tutor at home. 457-3607. |
| Will babysit children ages 3 & up. 267-4211. |
| Mother wants to babysit in her home. Graceland area. 436-4232. |

Former lower elem. teacher will care for children & help with homework during break. 268-6189.

Excellent child care in my home. Gables East area. 457-4073.

Will babysit in my home. Cooke & Indianola area. Mon.-Fri., daytime. 261-8594.

Child care and/or tutoring in my home. Call 267-3709. 3 yrs. exper. Will do babysitting in my home. Colonial Hills area. Day or week. 457-0270.

Will babysit in your home. Olentangy Commons area. Any day except Wed. 457-2355.


Will babysit Mon.-Fri. anytime, in your home, any area, but need transportation. 457-3659.

Reliable mother willing to be "substitute mother" & keep your children during these next few crisis weeks. Can provide help w/lessons, nice lunches, & lots of love & attention. Loc. off Calumet, between Indianola-High. 262-0803.

Will care for your school age children in my home. Holmesdale school vic. 546-9722.

Former school teacher will babysit in own home during school closing. Will have broadcast lessons on radio. (Sharon School district) 885-3707.

Mother with training in educ. will care for children 5-8, my home. Clintonville 263-5109.


Will babysit ANYTIME. In your home, Worthington Estates area. 816-2421.


Do you need a babysitter? Will watch children school age or under. 269-2500.

Experienced mother will care for your child during the day. Monday-Friday. Crestview school district. 262-9292.

Will babysit anytime Monday-Friday. In your home, Hudson St. area. 268-9140.

Will babysit in my home. Crestview area. Mon.-Fri., daytime. 251-7533.

Will babysit in my home. North end. Mon.-Fri. days, or eves. 476-8621.

Will care for children in our home, days. 2420 Glenmawr Ave. 263-8013.

Will babysit pre schoolers or kindergarten children, Clinton School area. 267-4280.

Babysit my home. Calumet-Crestview area. Rates. Inquire at 118 Olentangy St.
Public Library Sets Increase In Student-Related Programs

Expanded Public Library activities scheduled while schools are closed by the natural gas shortage include a film series for elementary school students and workshops in filmmaking and career opportunities for secondary students.

REGISTRATION for it and all other library programs can be handled, as of Thursday, by calling the main library, not the branches, the spokesman said.

Library video specialist Randy Stith will supervise the filmmaking workshop, which will be scheduled according to the amount of response the program attracts.

The program will treat basic techniques of script writing and production responsibilities. Student videotapes produced during the workshop will be scheduled for broadcast on public access television channels, the spokesman said.

PERSONS FROM the community who work in such fields as law enforcement, medicine, business and education will speak and answer questions about their work in the career opportunities program.

A list of speakers and dates will be available at library branches after Feb. 7, the spokesman said. Library officials also are planning to expand other services, such as film showings and story hours. Announcements will be made as details are arranged, the spokesman said.

CITIZEN JOURNAL
2/2/77

'Kid crisis' has parents snowed under

By RAY HUGHEY
Citizen-Journal Staff Writer

Harsh cold weather and natural gas shortages are closing Columbus area schools and creating headaches for working parents.

Do they do with the kids? Where can they find a babysitter? Could Grandma come visit? Should they do without a paycheck and stay home?

Some are turning to public service agencies for help. Others scan classified ads for sitters, inquire at nurseries and day care centers, or find more informal babysitting means.

CARL PORTER, executive director of the West Side Day Care Center at 40 N. Grubb-st. said he received numerous inquiries from working parents.

His center has 75 youngsters enrolled, and is licensed for 60. Another facility at 162 N. Ohio-av has 69 children enrolled, and is licensed for 79.

They are trying to revise licenses so they can handle another 20 to 30 youngsters during the closings.

Mary Lynn Vaughan, director of the North Side Day Care Center at 54 E. Third-st. received a number of calls. The center already is over-enrolled, she said, but will take in perhaps 10 more youngsters.

MANY CALLS also were received by Community Coordinated Child Care of Franklin County, which acts as a clearing house, executive director Hanna Dillard said.

Besides its own short-term emergency child care system, the agency has developed a pool of about 12 to 13 day care centers, and refers callers to the one nearest them.

She said the agency also makes referrals to the welfare department, which has about 600 child care slots for persons who qualify.

ANOTHER NURSERY school official said the public school closings mean older kids are home to babysit the smaller ones, causing nursery school enrollment to decrease 50 per cent.

Pat Powers ran a classified newspaper advertisement offering to babysit in her Whitehall home. So far, people are misreading the ad. She received 10 calls from persons wanting to babysit for her.

While schools close, bowling alleys, indoor tennis courts and skating rinks remained open, and some found themselves filling babysitter roles.

ONE TENNIS COURT operator said parents were dropping kids off at his place early Tuesday with sack lunches so they could stay all day. All the kids were getting on his nerves, he said.

Many bowling alley operators feel they provide a service by staying open, so parents can leave their children. Some are organizing activities for youngsters while schools are closed.

"It doesn't bother us at all," said Ron Beach, Amos Lanes vice president. "They're burning up energy and giving us free heat."

TIT THE KID BUSINESS had indeed picked up lately, said Dick Braun, manager of Main Lanes Bowling Center. They stay until about 4 p.m., which is about the time a school day would end.

Don Wortman, manager of the North Side United Skates of America roller skating rink, said he has been swamped with calls from parents asking them to open so they could send their kids over while they worked.
Mother Satisfied With School Plan

By Robert Albrecht
Of The Dispatch Staff

After a week of the "School without Schools" project, one East Side mother said she is satisfied that her two sons are learning as much as can be expected.

"I don't know that they're going to advance, but at least they won't lose what they have," Mrs Vernell Geddie of 651 S. Hampton Rd said.

IT HASN'T BEEN too hard to make Ken, 16, a junior at Eastmoor High School, and Tony, 10, in fourth grade at Fairmoor Elementary School, keep up with home assignments they've been given, she said.

Ken is losing out on his industrial arts classes, but there is still work for him to do in history and English.

Eastmoor teachers are mailing a weekly assignment list to their students, and they have set up temporary quarters at such places as the Jewish Center, 1125 College Ave, to meet with students who want extra help, Ken said.

TONY SEES HIS classmates for 2½ hours every day except Thursdays at Scottwood Community Church, 3330 Scottwood Rd Thursdays, Fairmoor students get a full day of classes at Deshler Elementary School.

He said he gets a lot of drill in arithmetic, reading and spelling and enough homework to keep pretty busy in the afternoons.

His mother, one of the educational aides the district laid off a few weeks ago because of financial problems, takes Tony and a group of his friends to school at the church and stays until time to bring them home again.

MRS. GEDDIE said the children are a little noisier than usual, but teachers are doing the best job they can, under the circumstances, and attendance has been good. "It's a shame they had to close, but all in all, the teachers are doing their part," she said.

The Columbus Public School system will carry on the "School without Schools" project for another two weeks. There will be a week of spring vacation after that, and classes are expected to resume March 7.
By PAULINE WESSA
CITIZEN JOURNAL Staff Writer

Cabin fever, a malady from Great-Grandma's day, is making a big impact on the contemporary scene with school closings and housebound kids.

A lot of adjusting is being required of family members. Housework schedules have gone down the drain. Sanity levels and senses of humor have been challenged.

NEARLY EVERY MOTHER we talked to said that eating is big on the agenda—and one mother of four teenagers said “if they don’t go back to school soon, we won’t be able to afford them”.

Logistics encountered by families with a number of youngsters—each, with a different schedule—are mind-boggling. One watches TV while another listens to the radio and then they switch.

KEEPING TRACK OF WHO should be doing what, where and when has reached Olympic proportions in some households, and making sure that each youngster gets to school for classes or field trips has necessitated carpooling and some complicated schedules.

“IT’S WORKING relatively well except for the little one...Stephanie, who’s 6...because of the difficulty of teaching reading. That’s an art rather than a mechanical. The primary kids need the attention of a trained teacher.”

“I HAVE TO BE THERE in front of the TV at 7.30 in the morning with pencil poised. I take notes and then I have to write them in print so Stephanie can read them. I have to make sure she does each step and understands exactly what she’s supposed to do with each little letter. The first day or two it took about six hours. I couldn’t believe it because I’m organized. Between programs or while she’s cutting and pasting, I run and throw a load of clothes in...or do something like that.

“Courtney, my fourth grader, is the organized one. She can read her list of instructions and do them by herself. We’ve made up a time chart on the board listing all the programs and field trips. I have less time to do the things I normally do in terms of housework. With mud and kids in and out, I have to be more flexible. And some special projects I was working on have been set aside.

“But Betty vowed, “when Friday comes and both are in school—1 Parkmoor—I am going to go to the movies and see ‘Fun with Dick and Jane’ and forget everything. Everybody I know is doing this,” she said.

Patti Baumann, who works at the Diocesan Communications Department, encountered some special problems. “We moved over one weekend—but to a more convenient spot near both Christ the King and Hartley schools, providing the children (she has six) with easy access to their schools.”

EACH OF THE KIDS—Patsy and Robbie, twins age 9; Karen, 13, Joe, 14; Terri, 15 and Chris, 16—has a different schedule and different place to be. “The older children look after the younger and Terri is assisting some of the neighborhood in babysitting because of sporadic schedules. Chris works at the school but is never sure what hours.” Patti said.

To keep track of who is where when she gets home, Patti has set up The Drawer. “All the information goes into that drawer and I read it when I get home. It’s kind of like an in-out basket thing.”

ASKED HOW SHE WAS coping, Penny Rice laughed...and laughed...and laughed. “It’s different,” she said. The house is a shambles.

THERE’S TERESA, 17; Edward, 15; Thomas, 10, Michael, 9; and Sharon’s little Alan (Abercrombie), 6, and Patrick, 5. “Our year-old Irish setter, Maggie, is in seventh heaven with all this bedlam.”

“We average at least one good fight an hour at different age groups, but at least we haven’t had to go to the emergency room yet. I wish it was summer.”

“THERE’S MUCH SHARING between them when they’re in their better moods. Some of the older ones read to the younger. They all go to Bexley except Eddie and he goes to St. Charles.”

Penny said the grocery bill has gone up, but going to the grocery has become a social occasion with the mothers lingering to talk to each other.

“AND I HAD A TELEPHONE call this morning from a friend a few blocks away who said, ‘Say something profound. Talk to me like a human being.’” Penny said, laughing.

“It’s nice when Eddie comes home and I can talk like an adult and have someone else tell the kids to sit down. We’re working on a TV room down in the basement because we are completely convinced they need to be down there away from us.”

“I’VE GOTTEN A LOT of closets cleaned upstairs...and washing is a joy because I’m downstairs away from them,” she said. “And I’ve changed my bath time to late at night.

“You look for retreats,” she admitted. “The warm days we’ve had have been a blessing. I let them go out when it was cold, but not for long because of frostbite...and I’ve worried about Thomas some mornings. He’s carriers of the C-J and he went out every morning. The morning it was 19 below, he worried me because he didn’t come and didn’t come. I sent Ed out and there he was just plodding along.

“And when they came on TV, about trash pickup—well, I realize some things are frozen to the ground—but I had to laugh when I realized here was a 10-year-old boy out delivering papers in the early hours every day and they were all out.

“The family congregates in one room by instinct to keep warm. We told the kids about coal furnaces and how you stood over registers to dress and how we stove them—or pretended to. We’ve had a lot more family sharing than usual. Even when the grandparents came over, they shared all out the old farmhouse with the outhouse.

“WE’VE LAUGHED A LOT. You HAVE to. But it’s been good to see people who normally wouldn’t speak to each other out helping each other.

“And whenever anyone starts complaining about not having anything to do, I usually come up with some chores and that ends that,” Penny said, laughing again.
The criminal offenses included in these statistics include the following:

Non-negligent manslaughter, rape, robbery, assault, burglary, larceny, vehicle theft

Jan. '76 - 253
Jan. '77 - 197
56 decrease of 22.1%

Feb. '76 - 244
Feb. '77 - 298
54 increase of 22.1%

The greatest increase in February involved auto theft. Rape went down considerably. Malicious destruction also decreased.

Jan. '76 - 623 cases
Jan. '77 - 410
213 or 34.2%

Feb. '76 - 794
Feb. '77 - 606
108  23.7%

Auto theft:

Jan. 13 adults, 6 juveniles
Feb. 10 adults, 7 juveniles (these are only the ones caught. There are many other unsolved car thefts.)
E. To obtain reactions to the Program by parents, students, and teachers

Reactions to the program by parents, students, and teachers are provided in Chapter III of this report. A few newspaper items relevant to their reactions are provided on the following pages. Reactions or particular importance in the judgment of the principal investigators included the following:

1. Parents, students, and teachers generally viewed the Program as a positive experience and, generally, a successful response to a school emergency.

2. All three groups would prefer the regular school program over some form of School Without Schools in the future.

3. Teachers viewed the program as an acceptable way of coping with a situation over which they had no control. They would have preferred more structure and mandatory participation.

4. There was some question among students whether the crisis was real, but they accepted the restructured school program with few objections.

5. Parents accepted the program as a necessary action by the school administration in a situation over which administrators had no control. They were anxious to get their children back in regular session as soon as possible.
High school students express shutdown views

by MARTIN ROZENMAN:

The cold-weather induced energy shortage has necessitated a temporary change in the educational routine for Columbus students. The Columbus Public Schools have initiated the "School Without Schools" program and Columbus Diocesan schools have also been forced to alter their schedules. Surprisingly, seniors from DeSales and Brookhaven aren't overjoyed that school is almost, but not quite, out.

"This is really disrupting schools," Bonnie Baird, a Brookhaven student, said. "There's not much you can do during winter. I think most students will keep up with their studies--there's not much else to do--and are anxious to get back to school. I feel sorry for kids in the future because of all the cutbacks that are being made."

"For some students keeping up with studies will be a problem. Others are more fortunate."

"We got three weeks worth of homework today," DeSales student Mike Sawczyn said, "but it will be a problem without help from teachers. We will be able to see them during the week, but they won't have as much time for each individual student."

"I'm going to take it easy and listen to my new stereo," Joe McCloskey, also from DeSales, explained. "I'll do all my work in one day and mess around the rest of the week. I think I'll get better grades. I think a lot of students enjoy doing the work by themselves and not being in school all the time."

"I'll forget things like chemistry and math," Brookhaven student Rhadhika Bhat complained. "It hurts not to have teachers' help."

"How to constructively occupy free time will be a common problem and challenge for almost all students. Most expressed an interest in partying, but this would not take up all of their free time."

"I have a parttime job and I'll also work at home," Brookhaven's Lisa Lanning said.

"There's nothing much to do but watch soap operas," Rhadhika Bhat said, and I only like 'The Young and the Restless.' You have to do something to entertain yourself. A lot of people will go to Florida now instead of spring break."

"I guess I'll go different places since I don't have a job," Brookhaven student Sharon Kelly stated. "This has interfered with school functions like dances and the Senior Party."

Linda Kolk, a DeSales student, has a slightly busier schedule. "I'll be at school everyday practicing gymnastics," she explained, "and I want to take a Senior Lifesaving course. I did have to cancel reservations in Florida. This will get pretty boring after awhile. My dad works nights and sleeps during the day, so I'll probably drive my parents nuts."

Although it is not yet a myth that students really dislike school, it's not totally fact either.

Lisa Lanning said students can handle cold temperatures in school buildings, noting that her cousins in Minneapolis get up and do jumping jacks every half hour or so to keep warm.

Patti Shansbaugh of Brookhaven noted that she'd "rather go to school when it's cold, than go while it's hot."

So despite all the complaints, students really do like school, at least a little anyway.

Brookhaven Principal Lewis Feesler noted that his school had the best attendance of the year last Thursday, one day after "School Without Schools" plans were announced.

"I think this proves that kids really want school," Feesler said, "maybe they've taken it for granted in the past, but not now."
The sponsor of legislation aimed at replacing local school property taxes with income and corporation franchise taxes conceded Tuesday his bill will face stiff opposition.

State Rep. Arthur Witkowski, D-Toledo, predicted the measure (House Bill 37) will pass the Ohio House this year but will face substantial opposition in the Senate.

THE BILL would allow a local board of education to place the income-franchise tax issue on the ballot to be voted on by residents of the school system's district. Witkowski said.

The board would be required to reduce property taxes while imposing the new income and franchise taxes.

Witkowski conceded that the new income-franchise tax could actually increase the overall taxes for the school district.

LOCAL OFFICIALS, Witkowski said, could still impose a limited amount of real estate tax for school purposes. His bill would also allow most school districts to generate more revenue through the new income-franchise tax than was generated through the old property tax, Witkowski added.

Major beneficiaries of the legislation would be low-income homeowners who cannot afford high property taxes, Witkowski said.

While overall local taxes probably would be increased under his bill, property owners would no longer shoulder the major burden of supporting schools, Witkowski said. This burden would be shifted to wage earners and businesses and industries, Witkowski said.

WILKOWSKI PREDICTED city officials would generally oppose his bill because many municipalities already impose payroll taxes.

These officials fear that another local income tax — for school purposes — would make it more difficult to get voters to approve boosts in municipal income taxes.

WILKOWSKI ADDED that the Ohio Education Association (OEA), which represents Ohio teachers, is unenthusiastic about the legislation.

Witkowski said the OEA's influence is limited in the House. But Senate Majority Leader Oliver O'Neal, D-Akron, has close ties to the teachers' union, Witkowski claimed. The OEA's potential opposition will make passage of the legislation much more difficult in the Senate than in the House, Witkowski said.

The bill was to be considered Wednesday by the House Ways and Means Committee.
F. To ascertain the extent of use of the Program outside Columbus

Use of the School Without Schools Program in districts surrounding Columbus was minimal during the month of February, 1977. Information about use by surrounding districts is provided on the following pages.

It remains to be seen whether the Columbus experience can be, or will be, used by other districts or again by the Columbus Public Schools in the future. A valuable collection of instructional materials (teacher handouts, television video tapes, radio audiotapes, newspaper Classroom Extras) was generated by the School Without Schools Program. Furthermore, a detailed administrative handbook of procedures for implementing such a program now exists. Availability and awareness of these materials and collections of information will undoubtedly influence use in the future.
Superintendents in seventeen districts surrounding the Columbus Public School District were contacted by telephone and asked to respond to a questionnaire. The following is a list of districts and superintendents contacted:

Bexley - Mr. Blough
Canal Winchester - C.A. Miller
Grandview - Don Williams
Hamilton Local - Roger Hoffman
Jefferson Local - Maurice E. Jones
Madison Local - Philip Williams
New Albany - Dr. Howes
Reynoldsburg - John Babel
Scioto Darby - Mr. Barnhart
Southwestern City Schools - Martin Stahl
Washington Local - Willard Grizzell
Westerville - Dr. Harold G. Row
Whitehall - Gilbert Johnson
Worthington - Dr. George M. Carnie
Columbus Parochial - Dr. David V. Sorohan
Columbus School for Girls - Mr. Chatman
Columbus Academy - Mr. Putnam

In response to the first question, five of the seventeen districts, closed for less than a week to convert to alternate fuel, or did not close at all. One system made plans to be closed for an extended period, but was able to purchase self help gas after one week. The remaining eleven were closed from two to four weeks, with most providing an alternate program for three weeks and taking spring vacation for one week.

All of the superintendents questioned whose districts were closed described their alternate plans. One mentioned confidentially that even though there was not a lot of education going on, he felt it was necessary
to look like something was happening. A friend of his in another
district in Ohio simply shut down, offering no alternative, and was
soon relieved of his job.

The alternate plans mentioned were similar to the Columbus plan;
including split sessions to provide one day a week in a building
heated by fuel other than gas. Teachers making telephone contact with
students was mentioned six times. Seven districts had teachers meeting
in homes with students. Six districts mentioned the use of homework
packets. TV was included in six reports. Trips were mentioned by five
districts. Two said there were no trips because of finances. (Inciden-
tally, many teachers this spring are finding it difficult to get
trips cleared because now we have to "catch up"). Radio was mentioned
four times. Newspapers were mentioned by five districts. The teachers
were generally required to be available. In one district, space was
rented in a shopping mall for H.S. teachers to meet with their students.
In one, the kindergarten met in a firehouse on a regular, full-time
basis.

Comments regarding the media include the following: The schools that
were open did not use the media programs. Four that were closed did not
use them officially, and did not care to comment. One interviewee said,
"The kids watched them, but they were not considered that useful." Another
said there was a problem in the variation between grades. A third said
he was, "very gratified they were there, BUT, even with coordinating
attempts, it was not the same as normal." A fourth said, "It created
more parental involvement than before. It whetted the appetite." A
fifth said, "They improved over time. Initially, they were geared to
lower middle, becoming more sophisticated. A sixth thought the Dispatch contribution was well-done. He heard comments both ways concerning the other media. A seventh called them "interesting and creative." An eighth said there was excellent response. "This is not criticism," he said, "but it left a false impression that we can do without teacher contact." A ninth stressed that many watched them as a supplement, and thought they were good as such. A tenth said they were excellent, "Under the circumstances, an attempt to do something was made. I have a feeling that people think schools aren't as necessary as they are. It was excellent in an emergency, but some people may think the academics were not interfered with."

Feelings were revealed in response to question 5, "How would you feel about doing this next year without a crisis?" Most said no and responded by explaining that they have already converted to alternate fuels to prevent it. One superintendent said he didn't think all the children benefit: "Independent study is for the upper echelon." Nine absolute "no" responses were recorded. One interviewer from a school district that did not close suggested that "It could be a fine method as an alternate plan, however, nothing competes with the classroom." Another said, "A lot used under crisis ought to be continued. We ought to be using community resources all along, not in lieu of classes, but with classes." Another interviewee said that for the most part, good things happened, but it is important that students stay in school. He said the independent learner atmosphere needs to be continued. One interviewee suggested that this might be a clue to a formal or informal summer situation limited by finances. Another thought they would like
it administratively, but the community is resisting. One interviewee said, "It was marvelous public relations, but an educational disaster: The decision to close for that long was premature and unnecessary." One person summed up the feelings of most of the responders when he clearly stated, "Next year? Over my dead body!"

In response to the question, "What would you do differently?" One said, "We won't have another crisis." Most have made plans for flexible school calendars, or for converting buildings to other fuels. Some who used only minimal resources suggested that they might plan a fuller program.

Five said they were not interested at all in Columbus School Without Schools Program. One said, "We know it was good P.R., but damn little education. It had people believing things were hunky-dorey when they weren't." He also said that as a P.R. venture it communicated to the public that "WE CARE." He said, "It may help pass the levy next time."*

The following are some areas of interest suggested by interviewees who would like to know more about the School Without Schools Program:
- How did student-teacher contact work out?
- Attendance in homes, classes, field trips?
- Cost, besides salaries. Cost of field trips, etc.?
- Achievement of children?
- Affect on graduating seniors?
- Children's attitudes?
- Attitudes of the public at large?
- How ARE schools meeting the closing crisis?
- Transportation problems?

*The voters actually turned down the Fall 1977 Columbus Public Schools levy, perhaps over their current desegregation and busing issue.
- Philosophy behind what went on?
- Evaluation of how successful the Columbus officials thought it was?
- Damage done. Was it the schools' liability?
- How many teachers DID use other facilities?
- How could the successful parts be incorporated into the ongoing program?
- What was NOT successful?
- Average number of hours of daily instruction.
- Administration and organization. Superintendent's reaction. How did he rally his forces?
- Student reaction, parent reaction, teacher reaction.
- How were they when they came back?
- Appraisal of TV (Would like to have own teachers in it too!)
- Could we make a media bank?

Other comments:
1. "The main significance is that Columbus has shown it could work together. Now they can work on the desegregation crisis."
2. "Depending on the media was ineffectual for getting information out. Messages got garbled or mislaid. Only three of ten stations aired the announcements."
3. "Schools were placed on industrial commercial basis. SMS was used as a reason why by Langdon Bell in a PUCO testimony in early February. He also said, "The public had trouble understanding why we had to pay during the shutdown."
4. "Parents see they have a role in the education of their own kids."
5. It might get the next levy passed.
I felt that many of these people felt themselves in a bind. They seemed obliged to follow the example of Columbus. They felt it necessary as a PR move to make their time out of school as productive as possible for the students, yet at the same time, they expressed an underlying concern that too much success might prove to the public that schools, which is what they stand for, might be seen as unnecessary. It is a stressful situation to be in a position of responsibility for the needs of people, successfully meet those needs, and at the same time feel that this same success demonstrates that everything one has stood for in the past just might not be as essential as we have told those we're serving.

This feeling of "double-bind" came through loud and clear in many of my conversations. There was a feeling of "I'm not sure how I should respond officially, but I do want to maintain my position."
Worth'n also forced to close buildings

Despite efforts to secure "self-help" natural gas, the Worthington City Schools have been forced to close temporarily. But school officials are hopeful that the learning process will continue even though the physical plants are not available.

School officials have devised a system called the "Emergency Learning Program." The program will require all students to meet at least once a week with teachers. Between meeting days, student will be required to complete assignments at home. Also during this time, students may work with their teachers in homes, through phone contacts and on field trips.

All students will meet once a week in the central and west areas of Worthington High School's main campus. These facilities are heated with electricity and fuel oil. Elementary and middle school children will meet in four-hour sessions either in the morning or afternoon, while all high school students will meet in one 5-hour session. Information on times and dates of these class sessions has been sent home with students.

The Emergency Learning Program is similar to the "School Without Schools" program devised by the Columbus Public School system. Worthington school officials are encouraging their students to make use of special educational programming on WBNS-TV and Radio, WOSU-TV and WCBE Radio. Worthington officials also hope to negotiate some media time for their own programming.

The Emergency Learning Program will remain in effect until schools can reopen which, officials say, could be at any time.

There are three factors which could reopen schools: the availability of natural gas from Columbia Gas Company. securing "self-help" gas from independent producers or warmer weather.

Until such time that schools reopen, all winter term Continuing Education classes scheduled at schools will be canceled.

High school extra-curricular and athletic activities will be continued as much as possible; middle school extra-curricular activities will be determined by each school.

Finally, officials announced that spring vacation has been changed from March 21-25 to February 21-25.
How did this happen?

Now, it seems bowling alleys and indoor tennis courts have suddenly been pushed or shoved into becoming babysitting emporiums. How about that? Schools must be closed but these enterprises can stay open. I have nothing against tennis courts or bowling alleys, but I can't fathom how such a state of affairs could possibly come about. — ANNE G. WINDMILLER, Rt. 2 Pickerington.

Schools Continue On Limited Basis

Educators in central Ohio area will try to keep open the lines of learning to students this week during forced shutdowns of most schools because of the shortage of natural gas.

HERE IS A list of education activities in area school systems this week:

- Grandview Heights — regular school schedule Monday and Thursday. No school Tuesday or Wednesday. No decision reached yet for Friday.
- Upper Arlington — senior high students will report Monday and Tuesday from 1 to 3 p.m. Junior high students report Wednesday from 12:30 to 2:30 p.m. Mini schedules will be in effect to give students opportunity to meet with teachers.
- Worthington — short session Monday for all students. Classes Tuesday through Thursday to be held at Worthington High School on a rotating basis for all students.
- Hamilton — parent-teacher conference 1 to 8:30 p.m. Monday. Teachers available at South elementary from 9 a.m. to noon Tuesday through Friday; for South students Tuesday, Central elementary students Wednesday, middle school students Thursday and high school students Friday.
- Canal Winchester — all classes on double sessions in new high school building; grades 7 through 12 from 8 a.m. to 1 p.m.; kindergarten through sixth grades from 1 to 5 p.m.
- Pickerington — regular classes for high school and middle school students Monday through Saturday in the high school building. Elementary school students will have class in the high school building through Saturday the week of Feb. 14.
- Bexley — regular classes Monday and Tuesday. Reduced schedules in all buildings 1 to 2:30 p.m. Wednesday through Friday.
- Whitehall — regular classes Monday and Tuesday. Students to meet with teachers in regular buildings from 9:30 to 10:30 a.m. Wednesday and Friday.
- Groveport-Marlison — regular classes for high school students Monday through Saturday. Double sessions for other students Monday through Wednesday.
- Reynoldsburg — students begin once-a-week classes at the junior high school on Monday. Students have been scheduled for the one day, depending on which city school they attend.
- Jefferson Local — elementary and middle school students will attend two two-hour sessions each week at the Gahanna Middle School. High school students will attend on Mondays, Wednesdays and Fridays.
- Plain Local — School will be closed for the next two weeks. Students were given instructional packets Friday for use during the closing.
- Westerville — all students will have normal classes on Monday. On Tuesday, secondary students will attend at regular buildings from 7:30 a.m. until 12:30 p.m. to receive new class schedules. Elementary students will have no school Tuesday, but will attend at regular buildings Wednesday from 1 to 5 p.m. when new class schedules and locations will be distributed. Elementary students will begin new schedules next Monday. After a day off on Wednesday, secondary students will begin attending classes at North High School on Thursday and Friday.
- Columbus Diocesan Franklin County Schools — closed. Classes at non-school locations.
- Washington Local (Dublin) — high school closed. Double sessions at Dublin Middle Schools. Elementary schools on regular schedule.
- Scioto-Darby (Hilliard) — closed. Teachers meet with students at non-school locations.
- South-Western — natural gas heated schools closed. Classes at schools with fuel oil or electric heat. Teachers meeting with students at non-school locations.
- Columbus — weekly classes transferred to 29 school buildings using fuel other than natural gas and to some non-school buildings made available by public or private firms. Attendance at all school functions will be taken.
CHAPTER V
IMPLICATIONS FOR THE FUTURE

A. Guidelines

The experience in Columbus yielded valuable information about restructuring a school system under crisis conditions. The following sections of the report contain suggestions to various groups gleaned from the Columbus experience and documents prepared by CPS personnel. The sections are directed toward:

1. Central administrators
2. Building administrators
3. Physical plant staff
4. Teachers
5. School Board
6. Parents
7. Students
8. Support units
1. **Guidelines for Central Administrators**

Guidelines for central administrators are organized into three categories:

a. Preparedness
b. Action
c. Review

**Preparedness** guidelines are as follows:

(1) Every school system should have a crisis contingency plan, adopted by the board, that indicates responsibilities of all personnel in the systems and directions for acting in each area of responsibility. The plan should cover, at least,

   (a) Communication
   (b) Facilities
   (c) Program
   (d) Transportation

   The plan should stipulate that all staff and employees are subject to temporary reassignment during a crisis and should describe in detail emergency assignments.

(2) An inservice training program for all personnel should be part of preparing for reorganization under crisis conditions.

(3) A crisis leadership board should be designated to formulate all decisions for the district and maintain leadership during the crisis. It is important that this board remain in communication during the crisis. The board might consist of a school board representative, a teachers union representative, the superintendent, an assistant superintendent, and possibly, the central administration department heads. Each person should assume responsibility for an area of the contingency plan. The crisis board should know the law and be aware of alternative
actions it can take under crisis conditions. Decision making protocol should be clearly explained, including especially those decision areas that require ratification by the school board and the extent of veto powers of different members of the board.

Preparedness in the four action areas could consist of the following:

(a) Communication

(1) contact people with newspapers, television, radio and key offices or agencies (e.g., school board, legislative, mayors office, teachers union, State Department of Education) should be established

(2) prepare directives to each level of personnel so they are ready for adaption and distribution

(3) establish communication lines (mail routes, telephone numbers, runners, etc.)

(b) Facilities

(1) mothballing plans for all buildings should be worked out in detail

(2) security and safety staff should have explicit instructions

(3) inventories should be continually updated and kept secure

(4) plan for contingency sites for instruction if regular facilities are removed

(5) arrange for or prepare contingency lists of emergency replacements for all personnel
(c) Program

(1) maintenance plan for instruction during a crisis period or a description of plans for communicating delivery of instruction to instructional personnel

(2) stock instructional material to support the contingency plan

(3) assign special responsibilities for program delivery under crisis conditions (e.g., media coordinators, rights and responsibilities of teachers, material reproduction staff)

(d) Transportation

(1) arrange for a support transportation system if needed (e.g., volunteer private autos, city buses)

(2) develop a list of standby drivers

(3) routes and schedules should be filed to meet different sets of assumptions about an emergency.

Action guidelines are as follows:

Materials gathered from the School Without Schools experience pertaining to actions assigned to school staff are provided in Appendix H. Points relevant to the roles central administrators play in operating a school system under crisis conditions include the following:

(1) Maintain communication with all schools and with the public.

(2) Make policy decisions, e.g., grading, mandated vs. voluntary participation.

(3) Troubleshoot

(4) Monitor operation of emergency plan and correct as necessary.

(5) Inform police, fire, civil defense, others of actions.
Review guidelines are as follows:

The main points for central administrators to consider following the emergency are:

(1) Revise the emergency plan where weaknesses appeared.
(2) Enlist assistance as needed to regroup.
(3) Identify problems resulting from the emergency period and begin action to resolve them.
(4) Undertake business, insurance inventory.

2. Guidelines for Building Administrators

While the emergency is in progress, this is where the action is in the areas of facilities, program delivery, transportation of students, and communication with teachers, parents, and students.

The bulk of the administrative guidelines developed for the School Without Schools Program was developed for building level action. These guidelines have been collected and are provided in Appendix H because of their exhaustive coverage of actions building level personnel may be asked to do. Points of note include the following:

(1) Daily physical plant inspection, security;
(2) Staff communication, telephone numbers, weekly staff meetings;
(3) List of resource people, agencies that could assist with programs, and telephone numbers;
(4) Very specific plan of action and assignments for building and staff maintenance of all programs including support services, such as school lunch programs;
(5) Daily report - attendance, participation, problems, daily log of staff activities;
(6) Payroll handling, mail handling;
(7) Reschedule events, e.g., athletics;
(8) Oversight of building, "mothball," if called for;
(9) Enforce district policy, legal matters (e.g., approval for use of non-school facilities);

(10) Summon emergency aid if needed.

In contrast to central administration where the emphasis is first on planning and then on review, building administration emphasis is first and foremost on action and implementation during the emergency.

3. Guidelines for Physical Plant Staff

The reader is referred to Appendix H for physical plant directions, especially for mothballing buildings. Points of importance include:

(1) Maintaining daily communication and reporting with building administration;

(2) Keeping a daily log of actions taken;

(3) Maintaining building security, conducting building checks;

(4) Assisting building administrators and faculty in implementing emergency storage procedures (see following pages for detailed directions on emergency storage);

(5) Directing operations for mothballing buildings, if called for (see following pages for detailed directions and cost estimates for mothballing buildings);

(6) Regulating utilities (gas, oil, coal, electricity, water) as directed by building administrator;

(7) Making emergency repairs;

(8) Assisting in conducting inventory of equipment and supplies.

The Columbus Public Schools "School Without Schools" Handbook contained an enormous amount of detailed information regarding emergency storage and mothballing. This information is valuable and is reproduced on the following pages. A March, 1977 article from the Ohio Association of School Business Officials also provided
detailed information and cost estimates for building shutdowns. That information is also reproduced for future use on the following pages. Readers wanting to skip the remainder of this section may turn to page...
Emergency Storage Procedures During School Closing

During the February emergency closing of schools certain equipment, materials and supplies may require special treatment or steps to safeguard them from damage by lowered temperatures.

Department administrators have prepared the following series of contingency instructions and procedures for the protection of school property. If teachers want to accept responsibility for any school property they require for their instructional program, please have them sign out those items to be responsible for them.

The following instructions are not applicable and definitive for every school, therefore, please exercise any additional cautions you deem appropriate for other unlisted school property.

Emergency Storage Procedures

In the event that schools are closed and buildings are "mothballed" for the duration, steps will have to be taken to avoid art materials and equipment being destroyed by freezing temperatures. Below is a list of procedures for assuring the safety of your various art supplies and apparatus.

We ask you to take all endangered items home and give them safe, warm storage. Perhaps some of your fellow teachers could help you with this task.

Please fill out the Inventory storage sheet. Leave a copy with your principal and maintain one for yourself.

To make sure that the plumbing in your area is properly drained, find out who has the draining assignment in your building and provide a
list of waterlines, pipes, taps, and drains located in all rooms of your department.

Art Supplies

1. **Enlargers:** Remove lenses, box carefully and take to warm place; cover enlarger with blanket or some heavy porous fabric.

2. **Cameras:** Box carefully and take to warm secure place.

3. **Projectors:** May leave in building but suggest storing in warm secure place (do not use until projector has returned to room temperature).

4. **Film (undeveloped):** If unsealed or not in tin or plastic, store in dry place.

5. **Film (slides, 16 mm):** Store in dry warm place.

6. **Photo Papers:** If unsealed, store in warm dry place (avoid condensation during transport by packing in styrofoam cooler or other insulated container). If sealed, may remain in school building.

7. **Chemicals:** Store mixed chemicals in above-freezing place; unopened dry packaged chemicals may remain in school building.

8. **Ceramic and enameling kilns:** May remain in school buildings.

9. **Moist clay:** If frozen, must be re-processed.

10. **Flammables:** If in metal containers, may remain in school building; if in glass containers, place in sink or metal leak-proof trash can in case glass breaks.

11. **All moist or liquid materials without alcohol content:** Remove to warm place, i.e., liquid tempera, varnish, enamels, inks (tube and bottle), acrylics, oils, glazes (mixed only), glue, paste, gesso, polymer medium, wax-resist liquis.
# INVENTORY SHEET:  
**TEACHER COPY**

**EQUIPMENT & SUPPLIES REMOVED FROM BUILDING FOR EMERGENCY STORAGE**

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**TEACHER'S**

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Mothballing - Audio Visual

The following items need to be protected from freezing temperatures:

1. Videotape recorders, cameras, and tapes.
2. Equipment that uses vacuum tubes - 16 mm projectors, radios, television sets, reel to reel tape recorders.
3. Audio tapes, cassettes, filmstrips, film loops, records, microfilm.

Batteries should be removed from all equipment.

Transistorized equipment should weather satisfactorily if protected by wrapping or boxing.

Central Sound Systems should be covered with protective material.

PLASTIC MATERIALS SHOULD NOT BE USED as a protective wrap as they will hold moisture. Use newspapers, canvas, etc.

Equipment such as overhead projectors, filmstrip projectors, opaque projectors, microfiche readers, should be protected but NOT moved.

Insofar as possible, equipment should NOT be stored against exterior walls.

CONTINGENCY PROCEDURES AND GENERAL INSTRUCTIONS FOR DEPARTMENT CHAIRPERSONS OF BUSINESS OFFICE EDUCATION AND DISTRIBUTIVE EDUCATION TO FOLLOW IN THE EVENT OF CLOSING OF SCHOOLS

General: All machines are to be unplugged. All machines are to be covered to keep dust out. Where possible, store small machines in BOE storage room and lock. Discard at take home all fluids, glue, etc., items that would freeze.

Specific Procedures to Follow for Each Type of Equipment:

A.B. Dick - Contact person Earl Meyers - phone 488-5961. Spirit duplicating machines. New models - take hose out of gallon can, pump air through the lines, consequently clearing all alcohol liquid to the reservoir. Once alcohol is in the reservoir it will evaporate before freezing. Keep machine covered and unplugged.

Old A.B. Dick - Container with alcohol must be removed. Recommend pouring of alcohol from container, either discarding into sink or pouring back into can for storage.
Standard Sprit Copy Machines - Check fluid level gauge. If not over half way full, leave as is. If the gauge reads "full" try to get fluid out of machine somehow. (When machine is full there is possibility of freezing, consequently major damage to the machine.) If machine is half full of liquid, freezing is almost out of the question. Keep machine covered and unplugged.

A.B. Dick Mimeo - Unplug and make sure ink pad is in correct diagonal "STOP" position and keep machine covered.

Photo Copier - A.B. Dick #675 copier. Petroleum base solution is used. Do not think that it will freeze. Consequently keep machine unplugged and covered.

3M Photo Copier - Model #209. Instructions are to take paper out. (White roll. nd pink intermediate rc?ils) Unplug, cover machine with plastic garbage bag or plastic cover provided when machine was delivered. The important thing is to keep machine covered and free from dust.


A.B. Dick Table-Top Offset - Make sure that the machine is cleaned, especially the ink rollers. Drain all solutions. Leave in night/ latch position.

IBM Key Punch - Seven locations. Unplug machine and cover completely.

3M Thermo Fax Machines - Make sure to cover when machine is cool to avoid dust getting into machine. Unplug.

Inner-Office Telephone System - No instructions. However, there is the possibility of moisture and condensation developing and having corrosion occur on the switching equipment. This will require a service call when operational again.

Transcribers and Word Processing Equipment - (S.E.C.C. and Ft. Hayes C.C.) Unplug equipment. Keep all equipment covered. Make sure that room temperature has been reached for at least eight (8) hours prior to turning on equipment. Once this is accomplished, turn on each piece of equipment for two (2) hours prior to operation.

Calculators and Mechanical Adding Machine - Cover machines and unplug. Allow machine to reach regular room temperature before starting to turn on again. This means the heat in Lab must be on for a minimum of 24 hours prior to operation of this piece of equipment.
Electric Typewriters - All electric typewriters present an unavoidable problem—condensation will occur with up and down temperatures, causing rusting of type bars, shaft and other metals. Machines should be kept unplugged and covered.

IBM Selectric and Other Element Machines - Unplug, completely cover, store if possible. Allow machines to reach room temperature before using.

Cash Registers in D.E. Labs - Cash registers at Briggs and Independence, Model DTS 100. Contact DATA CASH - phone 224-4800. To prepare machine for cold storage, remove cash drawer out of machine and in the back of the machine is a cover plate (either black or silver). Remove this plate and disconnect the black wire. This disassembles the battery package. Unplug the machine and keep covered.

Supplies - (Fluids, cleaners, glue, etc.) GET SMART, TH!$\text{K}!!: Check all cabinets and storage areas to determine what is freezeable and what is not. Pack up items that will freeze and take home.

Sink Location - Some of the BOE labs have a sink located in the storage room. Make sure to identify in writing to your building administrator, the location of this sink and that it needs to be drained if schools are "moth balled."

"Mothballing" Buildings

If it becomes necessary to "mothball" buildings, or close them without heat for a number of days, please take the following action:

1. Notify all regular teachers who are assigned cars to store those cars at their homes in as safe a location as possible. Engine should be started and run for several minutes the day before school resumes, to be sure car will start the first day of school.

2. Notify all substitute teachers who are assigned cars to return their cars to 17th Avenue the afternoon of the last day school is in session. If these substitute teachers are assigned to Driver Education positions when school resumes, they should contact me at 224-6488 (office) or 885-3234 (home) for car assignments.

3. Notify Driver Education Team Teachers at your building to secure trailers as follows:
   a. Remove projectors and films and store them in a teacher's home. Call me to let me know which teacher is storing these materials. Our insurance company tells us these materials are insured while out of the trailers.
b. Remove all personal items from trailer. Remove any liquid which might freeze.

c. Disconnect battery from emergency light.

d. Turn off all circuit breakers in trailer, turn off and padlock switch on outside of school building. Cables can be left in place.

e. Store steps inside trailer to make it more difficult for anyone to enter trailer.

f. Double lock doors with original locks and padlocks.

4. If multi-media equipment is in use in your school, store projectors and films at a teacher's home and let me know which teacher is storing them. The console should be stored in the school building in as secure a place as possible. Wiring taped to floors can be left in place, but responders should be disconnected and stored with the console.

Closing of Lunchroom for the Energy Crisis

Each Food Service Helper is asked to comply with the following instructions for closing the Lunchroom for the Energy Crisis:

1. On the last day of serving lunches, please send your Daily Lunch Report and copy of the bank deposit slip to your Satellite Manager, Quality Assurance Office by school mail, or stamped, self-addressed envelope to be sent to each school.

2. Lunch Program Monies - all monies on hand must be deposited in the Ohio National Bank by the Principal or person designated by him.

3. On the last day after you have served the lunches, do the following:
   a. Refrigerator - clean and unplug the refrigerator, leave the door propped open so odors may escape.
   b. Safety Alarm Recorders - (Only the schools receiving P.M. deliveries have these.) Please leave the switch on CLEAN so the refrigerator will not alarm when it is plugged in when we return. Place a new chart in the recorder. Please remember to send the chart and report to Burnett Collins, Quality Assurance Office, by school mail.
   c. Milk Coolers - clean and unplug the milk coolers, leave the doors open.
d. Oven - clean.
e. Tables - please make certain they are free of all soil.

4. Keys - please leave all keys with the principal.

Please call your Satellite Manager when you are finished with the above to inform her that your Lunchroom is ready for closing.

Milk - After lunch is served sell any remaining milk to children or adults. If you have any milk left in the cooler after the lunch period give it to students who serve the school in a special way (i.e., Safety Patrol, etc.). DO NOT LEAVE any milk in the cooler. (Same applies to Orange Juice.)

Care of Food - Store All Food Properly

1. All possible frozen meats, fowl, similar, as well as frozen vegetables and fruits should be used before the close of school.

2. Every effort should be made to use as much food as possible before the close of school.

3. Store any remaining dried eggs in tightly covered containers and refrigerate.

4. Store any remaining starch foods, rice, flour, cornmeal, macaroni products, rolled wheat, dried beans, and similar in tightly covered containers.

5. Refrigerate all foods that cannot be kept in dry storage.

6. All butter and margarine should be frozen. It is advisable to refrigerate only what will be used daily, and keep the remainder frozen.

7. All cheese is to be refrigerated, not frozen.

8. Milk and Bread - keep orders to a minimum - what is necessary only. On last day of operation, freeze any remaining milk and bread.

10. Consolidate all frozen and refrigerated products as much as possible and disconnect those refrigeration units not needed for storage.

11. PLACE LOOSE ICE CUBES IN EACH FREEZER LEFT IN OPERATION.

12. Ask custodian to check freezers and refrigerators that are left in operation.

13. All refrigeration and freezer space which is not in operation should be washed and rinsed to remove soil and then washed with baking soda water (1 tablespoon soda to 2 qts. water) and dried thoroughly. The doors are to be left open if they are not kept running. Fasten sign on door "Please do not close." PULL PLUGS DO NOT REMOVE CIRCUIT BREAKER LOCKS OR LOCKING BRACKETS ON CIRCUIT BREAKERS.

14. All counter units (salad pan and milk cooler units) shall be turned off. PULL THE PLUGS. DO NOT REMOVE CIRCUIT BREAKER LOCKS.

Locking Equipment

1. Do not lock any equipment, milk coolers, refrigerators, etc., unless food/supplies are stored in the units. Keep cash register drawers open or lock the cash registers in the storeroom or office. (Recommend moving cash registers to storeroom if possible, but leave drawers open.)

2. Clean the ranges, ovens, deep fat fryers, steam cookers and dry thoroughly. Leave pilot lights on.

3. Steam cookers should be left with doors ajar.

4. Dishwashers should be left open for ventilation after a thorough cleaning. Lift or remove "food collection" pans to allow air to circulate. Turn gas pilot off. Leave valve open.

5. All booster heaters should be turned off.

6. Tell the custodian all gas pilot lights on ranges, ovens, steam cookers, etc., are to be left on. Exception: The dishwasher and serving counters heated by gas. Turn these off.

7. Have all refuse and waste cans scrubbed with hot detergent water. Sanitize, rinse and dry thoroughly. Do not put paper in these. Leave uncovered.

8. Telephones. Be certain to lock the telephone. Keep office door locked if possible. Phone will be on - must be locked.

9. Safes are to be unlocked and open.
10. **Lunch Tickets** - The unused portion of rolls of lunch tickets remaining at the end of the last day of school should be locked in the storeroom. Do not leave in the safe, and do not send to the Food Service office.

**Security**

Please, be especially security conscious for the closing period. Custodians may do building checks, but you should expect that to be limited.

**STEPS TO BE TAKEN FOR EMERGENCY CLOSING OF SCHOOLS**

In the event that schools are closed due to the gas emergency the following procedures should be taken in the home economics rooms:

**A. Schools Closed, Minimum Heat (Above Freezing)**

1. Arrange with the head custodian to have the gas turned off to the ranges and dryers.

2. Remove all food from all refrigerators and freezers and discard. (Any item of value may be taken to your home freezer for storage should you desire.)

3. Unplug freezers and refrigerators, defrost and clean interiors. PROP DOOR OPEN SO THAT IT WILL REMAIN OPEN TO PREVENT UNDESIRABLE ODORS IN THE APPLIANCES. (This precaution is taken in the event of power failure.)

4. Unplug all sewing machines.

5. DRAIN the water out of all steam irons.

**B. Schools Closed, NO HEAT**

1. Arrange with the head custodian to have the gas turned off to the ranges and dryers.

2. Remove all food from all refrigerators and freezers and discard. (Any item of value may be taken to your home freezer for storage should you desire.)

3. Unplug freezers and refrigerators, defrost and clean interiors. PROP DOOR OPEN SO THAT IT WILL REMAIN OPEN TO PREVENT UNDESIRABLE ODORS IN THE APPLIANCES. (This precaution is taken in the event of power failure.)

4. Unplug all sewing machines.

5. DRAIN the water out of all steam irons.
6. Arrange with the head custodian to disconnect washers and dishwashers and be sure all water is drained from the appliances.

7. Arrange with the head custodian to shut off water and drain all pipes to sinks and hand bowls.

8. Empty bottles of distilled water or take them home to store.

9. All canned foods, bleaches, furniture polish, ink, liquid soap, and other solutions that would freeze are to be boxed and labeled: STORE IN A HEATED AREA. This should be brought to the attention of the principal or head custodian.

CONTINGENCY PROCEDURES AND GENERAL INSTRUCTIONS FOR DEPARTMENT CHAIRPERSONS OR TEACHERS OF TRADE AND INDUSTRIAL AND AGRICULTURE TO FOLLOW IN CASE OF CLOSING OF SCHOOLS

General

In the event that minimal heat is maintained in your building be sure to secure all flammable liquids under lock and key, lock up all tools, remove all saw blades, etc., that could be used in vandalism, grease all exposed machine surfaces, close off all draft sources, such as, air intake and exhaust systems.

In the event that a moth balling takes place with no heat we hope that you will do all in your power to help minimize any loss to supplies and equipment. Below is a partial list of precautions and suggestions that may help during this emergency.

1. Close all "draft areas" in your room, such as, outside air intakes, exhaust vents, etc.

2. Move benches away from windows and put rags at bottom of windows to absorb moisture.

3. Windows should be locked. If necessary make a locking device.

4. Grease all exposed machine surfaces.

5. Drain water from all air compressors and traps. (This may have to be done last.)

6. Clean and oil all Graphic Arts machinery, platten presses and offset equipment.
7. Drain blueprint machines of ammoni.

8. Make arrangements for heated storage for any liquid chemicals that you do not know the freezing temperature of (example: detergents, diluted chemicals and other water soluble chemicals).

9. Take precautions to protect all materials that freezing will damage, such as, glue, water base paints, etc. (This may mean taking them home if possible.)

10. Flammable materials should be stored in metal containers and locked in metal cabinets.

11. Tools should be oiled and stored under lock and key where they are not usually stored because of possible break-in at schools.

12. Remove blades from all power saws and lock up to avoid theft.

13. Take all batteries out of electronic equipment.

14. Box all electronic equipment feasible, put absorbent material inside and seal. We will supply boxes and absorbent materials. It may be advisable to take some equipment home. When equipment goes back into service do the following:
   a. Allow 24 to 48 hours to warm up and dry out.
   b. High voltage units, such as, scopes and power supplies, should be visually checked inside for dryness. Arcing could take place if it is not dry.
   c. Replace all batteries where needed.

15. Call for "pick up" on all Oxygen and Acetylene tanks.

NOTE: After returning to school and you find any damage to equipment due to vandalism, weather, broken water lines, etc., please inform this office immediately so we can get things back in operation as soon as possible.

16. Check the attached list and make arrangements to assure that all items which apply to you are provided for.
Prepare the following list of appliances by draining or pumping anti-freeze through them:

<table>
<thead>
<tr>
<th>Drain</th>
<th>Antifreeze</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Washers</td>
<td></td>
</tr>
<tr>
<td>Steam Cleaners</td>
<td></td>
</tr>
<tr>
<td>Floor Exhaust Systems</td>
<td></td>
</tr>
<tr>
<td>Floor Grid Systems</td>
<td></td>
</tr>
<tr>
<td>Air Compressors</td>
<td></td>
</tr>
<tr>
<td>Air Lines</td>
<td></td>
</tr>
<tr>
<td>Air Compressor Water Cooled Driers</td>
<td></td>
</tr>
<tr>
<td>Shop Toilets</td>
<td></td>
</tr>
<tr>
<td>Shop Urinals</td>
<td></td>
</tr>
<tr>
<td>Cooling Systems of cars which will be stored</td>
<td></td>
</tr>
<tr>
<td>Cooling Systems of Mock-up Engines which will be stored</td>
<td></td>
</tr>
<tr>
<td>Empty 55 gallon drums</td>
<td></td>
</tr>
<tr>
<td>Water Coolers</td>
<td></td>
</tr>
<tr>
<td>Unused lab areas with sinks and drains</td>
<td></td>
</tr>
<tr>
<td>Radiators</td>
<td></td>
</tr>
<tr>
<td>Sprayers</td>
<td></td>
</tr>
<tr>
<td>Water Cooled Machines</td>
<td></td>
</tr>
<tr>
<td>Machines with water cleaning systems</td>
<td></td>
</tr>
<tr>
<td>Insure water is out of lift pits</td>
<td></td>
</tr>
</tbody>
</table>
Library

1. Remove all plants, aquariums, live animals and other specimens that low temperatures would kill.

2. Remove supplies that would be damaged by freezing such as: ink, mystic tape, replacement lamps, plastic spray cans, thermal masters, AV repair kits, laminating supplies, etc.

3. Follow instructions regarding AV equipment and software as developed by the Department of Radio, Television, and Audio Visual Education.

4. Disconnect any copying machines.

17th Avenue Library

1. Check water lines and drains to break area, rest rooms, and for sprinkler system.

2. Arrange for removal and storage of equipment that would be damaged by low temperatures.

3. Prepare other equipment for low temperature:
   a. Bell and Howell Reader Printer - Disconnect and call service before using.
   b. MTST machine and all electric typewriters - Disconnect and do not reuse until 10 hours of warm up.
   c. Xerox machines - Disconnect.
   d. A.B. Dick Automated Press - Disconnect, clean, and remove rollers.
   e. Tape machine - Remove water.

4. Arrange for removal and storage of supplies subject to deterioration from low temperatures such as: glue, spray cans, thermal masters, mystic tape, labels, etc.

5. Notify companies that have hot and cold drink vending machines.

6. Notify all vendors to stop shipments until school reopen.

The above tasks would resolve some problems which would result from mothballing; however, nothing could be done about the following:

1. Damage to books and AV software - sheer volume prevents removal.

2. Approval of invoices - payment would be delayed until they could be checked.
Mothballing - Physical Education

1. All supplies for physical education should be stored in cabinets or on shelves in a designated area. This material should not be left on the floor. It is important that all materials are sufficiently secured.

2. Caution should be taken to assure that the materials are sufficiently warmed up before their use. Damage will probably not occur if the temperature is gradually lowered and raised.

3. Audio-visual materials such as films, loop films, and projectors should be taken home and stored in a warm area since extremely low temperatures can damage this equipment.

4. First aid supplies, especially those in glass containers, should be put in your medicine kit and taken home for warm storage.

5. All students should remove belongings from lockers, this includes clothing, deodorant cans, towels, etc. Remind students they will be expected to have their physical education clothing the first day schools reopen.

Closing School Health Rooms

Should the Columbus schools be closed due to the energy crisis, the following guidelines should be used to close the school health rooms:

1. Take audiometers and blood pressure equipment home to protect from loss or vandalism. Transport inside your car rather than the trunk as the audiometer may be damaged by severe cold.

2. Arrange with the school office to lock up small equipment and health records similar to the procedure for closing school in June.

3. Call Molly Parsons if you have questions about your role or responsibilities during this crisis.

Mothballing - Science

Elementary:

Equipment - No equipment provided by our department should suffer damage if subjected to low temperatures. If in doubt about a particular piece of equipment, call the Science Department, phone 225-2728.

Chemicals - Flush all liquid chemicals down a sink, using an ample supply of water. Allow at least a minute of water flow between each different kind of chemical. Let water run for at least five (5) minutes after the last chemical. Alcohol burner fuel will not freeze if kept in the buildings, and need not be flushed down the sink. Dry chemicals will not be damaged by the cold.
Living things:

A. Drain all aquaria, aquaria filters and pumps. Air pumps need no draining. Send all living things in aquaria home with volunteer students if possible.

B. All animals kept in small cages should be sent home with student volunteers if possible.

C. All plants and terrariums should be sent home with student volunteers if possible.

Secondary:

Equipment - No equipment provided by the science department, except calculators, should suffer damage by low temperatures. Calculators should be taken home or transported to any available alternate storage area where temperatures will not go below 40 degrees F. If in doubt about a particular piece of equipment, call the Science Department - phone 225-2728.

Chemicals - Flush all liquid chemicals that may be in danger of freezing at about 0 degrees F down a sink, using an ample supply of water. Allow at least a minute of water flow between each different kind of chemical. Don't flush acids down with organic liquids. Most concentrated acids will withstand the low temperatures, but all diluted acids, bases and reagents should be flushed down a sink. When in doubt, dump it!

Living things:

A. Drain all aquaria and tubing. Send all living things in aquaria home with student volunteers if possible.

B. All animals kept in environmental chambers, cages, or terraria should be sent home with student volunteers if possible. Shut down all environmental chambers.

C. All plants and small terrariums should be sent home with student volunteers if possible.

D. All cultures of microorganisms should be flushed down a sink with an ample supply of water.
Noted below are general elementary school materials, and instructionally related materials which should be removed from buildings before the building is "moth balled":

**ART MATERIALS**
1. G'jzes
2. Turpentine
3. Varnish
4. Shellac
5. India Ink
6. Gum Solution
7. Fixative Spray
8. Vinegar
9. Tempra Paint

**OFFICE MATERIALS**
1. Rubber Cement
2. Spray Cans
3. Ink
4. Glues (liquid)
5. Correction Fluids
6. Mimeo Ink (remove from mimeograph)
7. Ditto Fluid (remove from ditto machine)
8. Copier Toner (remove from copier)
9. Copier Dispersant (remove from copier)

**CLASSROOM MATERIALS**
1. Aquariums (emptied)
2. Science Kits (liquids removed)
3. Liquids - all liquids should be removed from Teachers' and Students' Desks

**MISCELLANEOUS MATERIALS**
1. Pop Machines (emptied)
2. Milk Coolers (emptied)
3. Nurses' Supplies (liquids should be removed)
ELEMENTARY TEXTBOOKS

Every student should take home their present reading book. All students (grades 3-6) should take home their spelling and mathematics books. Second grade students, only spelling books. Teachers may make assignments in other areas that would involve additional books going home. A record of books each student takes home should be kept by the teacher.

All books should be removed from window ledges and if possible, from exterior walls.

Students should be encouraged to participate in special programs via WCBE and other educational stations.

SECONDARY TEXTBOOKS

Students should continue to assume their responsibilities for the textbooks assigned to them.

All textbooks should be taken home.

CONSUMABLE WORKBOOKS

Consumable workbooks (mathematics, handwriting, reading, etc.) should not be sent home. Teachers may provide instruction in these books when meeting with their classes.

Separate pages from workbooks may be duplicated and used as a homework assignment. The consumable workbook resource is not easily replaced and if taken home could be thrown out, burned or misplaced. To assure that students and teachers will have this resource available when regular school resumes the duplication process should be used.

PRINCIPALS ARE REQUESTED TO DUPLICATE THIS PAGE FOR A HANDOUT TO TEACHERS
Vocal Music Equipment

Pianos are affected more by heat and humidity than cold. Less damage would occur when the temperature is lowered and raised gradually. The pianos will probably require two or more tunings after being in extended cold temperature.

The electronic music equipment is not affected by cold temperatures, however, it is suggested that all equipment and materials be stored on shelves off the floor to avoid possible water damage.

Secondary Vocal Music Room

Piano

1. Move all pianos to an inside wall in the classroom.
2. Cover the piano with a canvas or blanket if available.

Record Player, Tape Recorder and Rhythm Instruments

1. Store all equipment on shelves off the floor.

Elementary Principals

Piano

1. Move all pianos to an inside wall in the classroom.
2. Cover the piano with a canvas or blanket if available.

Record Players, Tape Recorders, Rhythm Instruments, Autoharps, Resonator Bells

1. Store equipment on shelves off the floor.

Piano Labs and Orff Instruments

1. Move to an inside wall in the classroom.

Instrumental Music

In case schools are closed and buildings are "mothballed" the following procedures and precautions should be followed:

1. Students should take their privately-owned instruments home.
2. Students who have rented a school instrument should be encouraged to take it home.

3. The following precautions should be taken for instruments remaining at school:

A. Strings--keep violins and violas in cases and cover cellos and string basses and store them on shelving off the floor.
B. Woodwinds--be sure all moisture has been dried out of each instrument and store in cases on shelving.
C. Brasses--empty spit valves and empty out slides and tubing, store in cases on shelves.
D. Percussion--cover all instruments, store drums off the floor.
E. Pianos--store against inside wall, cover piano with cover or piece of cloth.
F. Electronic equipment--store as usual in a dry place.

Keep all instruments away from heating units, doors or windows.

The music stores tell us that all instruments can take extreme cold weather if the change of temperature is gradual. This also would apply to the restoration of heat in a building. Damage to wood instruments is usually caused by extreme heat and humidity. Be sure all instruments and equipment are stored off the floor.
MOTHBALLING PROCEDURES AND COST ESTIMATES*

IF YOU MUST CLOSE--

School officials should be aware that the Ohio State Department of Education published a "Guideline for Closing Schools Due to Lack of Fuel" in January, 1974. Copies can be obtained from Columbus. The following materials are furnished as a supplement by the Energy Committee of OASBO.

I. SCHOOL SHUT DOWN PROCEDURES AND THE ESTIMATED COST INVOLVED IS AS FOLLOWS:

<table>
<thead>
<tr>
<th></th>
<th>Description</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Shut off the gas supply at the regulator.</td>
<td>$5.00</td>
</tr>
<tr>
<td>2</td>
<td>Shut off water at the curb (Utility Company).</td>
<td>$5.00</td>
</tr>
<tr>
<td>3</td>
<td>Compressor rental for 40 hours.</td>
<td>$200.00</td>
</tr>
<tr>
<td>4</td>
<td>Remove the water meter and drain it. Suck water from main line to curb box.</td>
<td>$40.00</td>
</tr>
<tr>
<td>5</td>
<td>Drain domestic hot water heating tanks.</td>
<td>$800.00</td>
</tr>
<tr>
<td></td>
<td>Note: Turn off fuel supply. Open the line at the furthest point and several pertinent locations and apply compressed air at 50 P.S.I. Blow the water back to the meter opening.</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Open all flush valves; remove cap disc and remove water-50 valves.</td>
<td>$100.00</td>
</tr>
<tr>
<td>7</td>
<td>Open all sink faucets and block open-20 units.</td>
<td>$40.00</td>
</tr>
<tr>
<td>8</td>
<td>Electric water cooler drinking fountains-unplug and remove drain plug from tank. Block hand valve open-8 units.</td>
<td>$100.00</td>
</tr>
<tr>
<td>9</td>
<td>Open all regulators to drinking fountains and remove water-20 units</td>
<td>$100.00</td>
</tr>
<tr>
<td>10</td>
<td>Remove most of the water from sink P-trap; pour in one cup of ethylene glycol-30 units.</td>
<td>$100.00</td>
</tr>
<tr>
<td>11</td>
<td>Remove most of the water from toilet P-trap in stools and urinals. Pour in one pint of ethylene glycol-50 units.</td>
<td>$150.00</td>
</tr>
<tr>
<td>12</td>
<td>Floor drains--pour in one pint ethylene glycol-20 units.</td>
<td>$100.00</td>
</tr>
<tr>
<td>13</td>
<td>Open exterior hose bibs-10 units.</td>
<td>$10.00</td>
</tr>
<tr>
<td>14</td>
<td>Remove hot water circulating pumps and drain return lines-2 units.</td>
<td>$10.00</td>
</tr>
<tr>
<td>15</td>
<td>Remove aquariums and drain-2 units.</td>
<td>$20.00</td>
</tr>
<tr>
<td>16</td>
<td>Open and drain dish washers pumps-1 unit.</td>
<td>$40.00</td>
</tr>
<tr>
<td>17</td>
<td>Open and drain clothes washers pumps-2 units.</td>
<td>$40.00</td>
</tr>
<tr>
<td>18</td>
<td>Open and drain booster heaters for dish washers-1 unit.</td>
<td>$10.00</td>
</tr>
<tr>
<td>19</td>
<td>Open and drain steam jinneys from auto shops-1 unit.</td>
<td>$10.00</td>
</tr>
</tbody>
</table>

20. $10.00 Open and drain steam boilers on food service pressure cookers-2 units.
21. 300.00 Remove all fire sprinkler heads. At the furtherest point apply compressed air at 50 P.S.I. to remove water from the sprinkling system-10 units.
22. 10.00 Drain water cooled refrigeration system-1 unit.
23. 20.00 Drain water cooling tower and storage tanks from air conditioning system-1 unit.
24. 50.00 Remove grease trap covers and install antifreeze-2 units.
25. 100.00 Pump water from dilution sumps from art and science rooms-2 units.
26. 200.00 Pump water from clay traps and remove clay-3 units.
27. 50.00 Remove water cutting oil from shop cutting machines-5 units.
28. 40.00 Remove boiler and mud leg plugs; open blow down valves and drain system-2 boilers.
29. 500.00 Open steam lines and headers at their furtherest point and apply compressed air at 50 P.S.I.
30. 500.00 Remove float traps, drain and leave disconnected-50 units.
31. 100.00 Remove air vents on steam coils and drain-24".
32. 10.00 Drain water from safety controls-2 boilers.
33. 100.00 Remove feed water pump and drain-2 units.
34. 20.00 Drain feed water receiving tanks-2 units.
35. 50.00 Drain vacuum pumps and tanks-2 units.
36. 50.00 Drain heat exchangers-1 unit.
37. 300.00 Drain radiant heat for under floor heaters and blow out with compressed air at 50 P.S.I.-2 units
38. 20.00 Drain expansion tanks-2 units.
39. 1000.00 Drain heating hot water loops and blow out with compressed air at 50 P.S.I.
40. 500.00 Shut off air compressors and drain tanks, filters and air lines. Flush with nitrogen-1 unit.
41. 10.00 Shut off fire alarm system, especially smoke detectors.
42. 10.00 Shut off clock and bell systems.
43. 100.00 Shut off gas to all educational equipment, lab tables, stoves, etc.
44. Close and lock all exterior doors; install chains and locks (make them very tight) on all doors except one entrance door.
45. Open classroom doors.
46. Close all windows and lock; re-check every window to be certain that it is locked.
47. Deliver extra replacement windows, window boards, bolts and locking strips to the boiler room.
48. Close all window drapes, shades and blinds.
49. Turn off all lights except interior and exterior security lights.
50. Open all electric breaker panel doors.
51. 100.00 Check all back draft dampers to be sure they close properly.
52. $100.00 Check attic dampers to be sure they close properly.

53. Remove all waste and garbage from building.

54. $500.00 Cover all outside air and exhaust air grilles with plastic.

55. $50.00 Disconnect all acet., agron, oxygen tanks and install nitrogen in lines.

56. $20.00 Shut off as many electric power panels as possible.

57. Oil all shop equipment that will rust.

58. Remove pets, plants, fish, etc.

59. $200.00 Remove water base paints, floor finishes and water based scientific supplies, etc.

60. Remove all perishables that would freeze.

61. $10.00 Empty vending machines and leave doors open.

62. $200.00 Empty refrigerators, freezers and leave doors open.

$7110.00 Possible cost involved for shutting down a school building. Estimated man hours=700.

Some other areas of concern prior to shutting down a school building are as follows:

1. Notify the U.S. Post Office for a change in the mailing address or holding the mail at the Post Office. Some post offices will hold first class mail and parcel post for up to 30 days.

2. Notify all vendors to withhold deliveries or substitute a change of address.

3. Notify all truck lines who normally deliver to a school building of a change in address.

4. Notify United Parcel Service of a change in address.

5. Notify all utility companies of the school closing.

6. Notify all city departments of the school closing...police, fire, water, sewer, engineering, etc.

7. Notify security companies of the school closing.

8. Notify construction contractors who have contracts to complete.

In the event of a complete shut down, structural engineers, architects, utility companies, mechanical engineers, plumbing contractors and electrical engineers should be consulted as to potential major damages to the physical plant which might result or could be prevented. Some of the following items are of major concern: (1) roof failure; (2) parapet wall failure; (3) structural damage; (4) masonry damage; (5) twisted door and window
mullions; (6) broken pipes; (7) heaved thresholds; (8) plaster and paint damage; (9) frost damage to interior footers; (10) wood floors buckling; (11) floor tile and carpeting coming loose; (12) ceiling tile or acoustic plaster damage.

The problems involved with reopening a school building can vary widely with the severity of the weather, age and construction of building, and length of shutdown.

II. RE-OPENING PROCEDURES AND THE ESTIMATED COST INVOLVED IS AS FOLLOWS:

$ 14,220.00 Reassembling systems (1,400 man hours).
$ 5,000.00 Fire, theft, vandalism.
$ 5,000.00 Electronic equipment and materials that have picked up moisture and other damage.
$ 50,000.00 Major damage to physical plant.
$ 700.00 Replace 20% of T-stats-10 units.
$ 200.00 Replace 50% of flush valve diaphragms-25 units.
$ 500.00 Replace 15% of steam traps-10 units.
$ 15,000.00 Replace 5% of piping and fixtures.
$ 500.00 Replace 50% of steam valve discs-25 units.
$ 200.00 Replace 50% of smoke detectors that don't have resets.
$ 500.00 Replace 10% of clocks, bells and P.A. systems.
$ 500.00 Replace 10% of unit ventilator motors.
$ 200.00 Replace paper damage.
$ 1,700.00 Payroll for personnel who are required to work--supplemental contracts: warehouse deliveries, data processing, accounts payable, payroll, mail services for administration, emergency personnel. Minimum 2 hour building check, per day, per building.

$ 94,220.00 Possible re-opening cost
$101,330.00 Total estimated cost for shutting down and re-opening a school building.
TO MAINTAIN BUILDINGS AT A MINIMUM TEMPERATURE

by OASBO Energy

I. POTENTIAL PROBLEM AREAS

1. Bells, horns and buzzers if not turned off at the master clock.
3. Fire alarms and smoke detectors.
4. Freeze ups.
5. Plumbing lines in exterior walls if not drained.
6. Outside air and exhaust air grilles if not covered.
7. Electric motors.
8. Sump pump.
10. Data processing and other electronic equipment.
11. Fire extinguisher freeze ups.
12. Vandalism.

II. SHUT DOWN PROCEDURES PRIOR TO CLOSING

1. Clean total building.
2. Turn off all acet, argon, oxygen and propane valves.
3. Shut off gas to educational and food service equipment, i.e., lab tables, stoves, etc.
4. Hot water heaters should remain on (set temperature back to 100 degrees).
5. Hot water circulation pumps should remain on.
6. Vending machines should remain on, but contents should be removed.
7. Air compressors should be turned off and drained.
8. Close and lock all exterior doors; install chains and locks (make very tight) on all doors except one entrance door.
9. Open classroom doors.
10. Close all windows and lock; re-check every window to be certain that it is locked.
11. Deliver extra replacement windows, window boards, bolts and locking strips to the building.
12. Close all window drapes, shades and blinds.
13. Turn off all lights except interior and exterior security lights.
14. All electric breaker panel doors should be left open.
15. In hot water heated buildings the circulating pump should be left on.
16. In electric heated buildings the radiant heat should be left on.
17. Check all back draft dampers to be sure they close properly.
18. Check attic dampers to be sure they close properly.
19. Remove all waste and garbage from building.
20. Turn on the security system upon leaving, if applicable.
21. Review security procedures to prevent unauthorized entry.
22. Reduce food inventory.
23. Remove all perishables that will not keep in excess of 30 days.
24. Remove pets, plants, fish, etc. from building.
25. Remove all monies from the building.
26. Do not remove telephones unless it is for more than 30 days.
III. DAILY OPERATING PROCEDURES

1. Building operators must call in to a designated official daily.
2. Arrange for daily building checks.
3. Maintain the building temperature so that it will not drop below 40° in the coldest area during the next 24 hours.
4. Check the temperature of the freezers and refrigerators. If freezer temperature rises above 20° or refrigerator temperature rises above 40° report this immediately to the designated official.
5. Check all rooms in the building for temperature, roof leaks, water leaks, fire, vandalism, etc.
6. Complete total vision check of the building exterior.
7. On steam heating systems, after you have shut the boilers down, be sure to operate the vacuum pumps on continuous cycle for a minimum of 15 minutes and then return to the float position.
8. Fill out a vandalism report for each case of vandalism and submit to the designated official.
9. Report all cases of vandalism immediately to the designated official.
10. Call the designated official for assistance or energy information (telephone number).

IV. OTHER ITEMS OF IMPORTANCE

1. Personnel who are required to work:
   - Building operator- 4 hours per day, 7 days a week.
   - Recommended time (12 Noon to 4 P.M.)
   - Emergency maintenance personnel
   - Mail services
   - Warehouse deliveries
   - Payroll
   - Data processing
   - Accounts payable
   - Supervision
3. Notify the U.S. Post Office for a change in the mailing address.
4. Notify all vendors to withhold deliveries.
5. Notify truck lines for change in delivery address.
6. Notify United Parcel for change in delivery address.
7. Notify utility companies.
Two big lessons were learned from the Columbus experience. First, teaching through television and radio requires skills that many teachers had to learn. Appendix I contains guidelines for teachers who taught via television. Second, teachers should have printed instructional materials and worksheets on the shelf as a contingency for a crisis situation. Content in Appendix II that relates to teacher responsibilities includes the following:

1. taking responsibility to be knowledgeable about the operation of the program as it affects the teacher, his or her students, and their parents, and facilities and materials used by the teacher;

2. planning instructional actions for the emergency period—scheduling classes, projecting assignments, determining activities during the period;

3. maintaining communication, reporting with the building administrator, department chairpersons, students, parents, colleagues;

4. bringing problems to the attention of the building administrator;

5. maintaining record keeping—e.g., attendance, lunch program use;

6. storing, saving instructional equipment, materials, and supplies (see pages in preceding section);

7. following central administration policy and legal procedures for field trips, other experiences;

8. knowing fire and emergency evacuation procedures for any facility used for instructional purposes.

5. Guidelines for School Boards

Although not directly involved in school operations during a crisis, the Board can play an important role in establishing policy that would clear the way for school administrators to act
with emergency powers under crisis conditions. The Board can also
play an important role in rallying the community behind the school
system in times of need.

The community and the Board did raise certain concerns about
School Without Schools in Columbus. These concerns included:

a. mothballing of buildings
b. destruction of uninhabited school facilities
c. effects of the program on education

6. Guidelines for Parents

Parents must take on certain responsibilities for education
during a crisis. Most important, they must be responsible for
their own children clarifying directions given to them, watching
over their safety and security, insisting on completion of school
assignments, and trying to assist their children when they need
help on homework. Parents should volunteer services or facilities
when possible and cooperate with school officials as requested.
Parent involvement during School Without Schools included:

7. Guidelines for Students

Students will get out of a contingency program an amount
proportional to the commitment they have to making it work. Hence,
students are advised to follow instructions from their teachers
and to take advantage of educational opportunities made available
to them. They should be sure they understand instructions given
to them during the crisis period and should ask questions if
they do not. Cooperation and participation during an emergency
are the students' greatest responsibilities.
8. **Guidelines for Support Unit**

Units with staff working in counseling, evaluation, legal services, curriculum development, public relations and the like should be prepared for special assignments during a crisis. Roles they might play include:

1. monitoring all utilities in school buildings: gas, water, electricity
2. monitoring security and condition (temperature, damage) of school facilities
3. preparing press releases for administrator approval, at the direction of school central administration
4. maintaining a hotline to answer questions about the crisis program or to coordinate questions and responses as needed
5. preparing short term plans (bus assignments, routes, building assignments for children)
6. outlining legal and contractual constraints that the emergency board will need to deal with
7. conducting parent conferences.

B. **Implications**

The experience of School Without Schools has led the co-authors of this report to reflect on the following implications for educators:

1. **For School Planners.** It is predictable that the energy crisis in Columbus was not an isolated event and that school closings due to extended cold weather or other natural disturbances will be seen more and more frequently. First, alternative models of scheduling public instruction will need to be developed and thoroughly analyzed for their implications for a given school district. Year round schools with extended winter vacations, January plans with projects assigned outside the classroom, and other new and creative schedules will need to be considered.
Second, energy plans are needed for school districts before they can determine the feasibility of remaining open during future winters. Commitments from public utilities for as long as five years into the future must be known and negotiated; changeovers from present energy sources to more readily available ones must be started and budgets should be adjusted to accommodate them; new sources of energy (artificial or manufactured gas, solar, and nuclear sources) must be considered and evaluated. Surprises in mid-year will not be tolerated by the public very long.

Third, alternative program delivery systems and crisis contingency plans are needed for school districts. If school buildings are closed in the future, does that mean education cannot be continued? The answer in Columbus was "no," but School Without Schools was only one of many alternatives that could be developed to put a school district in readiness for the next crisis. Walkabouts, Experience Based Career Education, and short term magnet programs are but a few of the ideas for education outside the school building that need to be considered and developed.

2. For Federal Research and Development Agencies. Research and Development projects and in-service training, funded by such agencies as the National Science Foundation (in Science), the U.S. Office of Education, the National Institute of Education, and state education departments, are needed to prepare the nation's schools for crisis programs. As noted several times in this report, it is evident that schools will continue to close for any number of reasons, and most districts do not have contingency plans or materials for instruction. Curriculum development is needed to prepare "shelf" materials and teaching procedures
that can be used when a crisis strikes. Further, administrative contingency plans and assignments should be a regular part of any district's policies and procedures. Most districts cannot afford to direct scarce resources to contingency planning and development, leaving the onus for action on federal and state agencies supporting education.

Another dimension of crisis planning that federal and state agencies should consider is research on viable alternatives to classroom instruction under crisis conditions, on organizational behaviors and methods of coping under crisis conditions, and on the nature and effects of different crises that affect education. We know little about the extent to which schools are affected by crises in this country nor do we know how they have responded under different crisis conditions. Such knowledge is going to be extremely important to school administrators in the future if our predictions of continuing and more frequent crises are correct.

3. **For Local and State Curriculum Development Specialists.** The need for curriculum and administration plans described under (2) above should not be overlooked by local and state education agencies. Although support for research and development should come from federal agencies, such products will need to be supplemented and modified to fit local requirements. Furthermore, many written, audio, and video materials already available to districts can be organized around a locally developed contingency plan. Every district should have a crisis plan on the shelf ready for implementation.
4. **For Organizational Development and Inservice Training.** Contingency planning and preparation is more than just a fire drill as the Columbus experience has demonstrated. Personnel assignments and responsibilities should be detailed, structured, and understood. School districts should indoctrinate all personnel in the contingency system to be ready if and when a crisis strikes.

5. **For Legislative Action.** The next time a crisis happens, a school district may not be able to wait ten days for legislative action that will make its contingency program legal. Legislation affecting the legality of school board or administrative decisions under crisis conditions should be reviewed at both the local and state levels and new laws should be proposed in the event emergency actions are prevented by current legal barriers.

Another type of legislative action may be required if districts do not appear to be prepared for continuing their responsibility for public education even when emergencies occur. State or federal legislation may require approved contingency plans to be part of any districts policies and procedures.

A third concern for state and federal legislation is the distribution of energy resources in this nation. Federal energy laws prohibited a quick solution to Columbus' energy problem. State investigation into planning and development practices of the Columbia Gas Company followed the Columbus crisis. Reassignments of priorities to place schools in the category of Human Needs is being considered. Energy use by schools (type, rate, and total amount) is being reviewed. Regulation/deregulation continues to be an issue that affects education.
A further implication for legislative action is providing for school crisis funds. Legislative action to help schools under emergency conditions does not need to be ad hoc or hurried. Carefully planned and formulated legislation could be prepared prior to, and in preparation for, the emergency need for funds to continue education under crisis conditions.

Considering all of the above recommendations for contingency planning, however, it must be emphasized that planning, to be effective, must be an on-going process. Plans on the shelf that are directed to pertinent sets of assumptions can be invaluable in providing a running start in response to an emergency, but such plans only form a point of departure. To respond effectively to crises, people must be skilled in the process of continually planning, executing, evaluating, and revising their response actions. The main message of this report is that the "Columbus Story" gives great impetus and direction to those thousands of schools and communities that need to improve their capacities to cope with educational emergencies.
A STUDY OF SCHOOL WITHOUT SCHOOLS:
THE COLUMBUS, OHIO PUBLIC SCHOOLS
DURING THE NATURAL GAS SHORTAGE,
WINTER, 1977

James R. Sanders
Daniel L. Stufflebeam

December, 1977
Co-Principal Investigators:
- James R. Sanders, Associate Director, Evaluation Center and Associate Professor of Educational Leadership, Western Michigan University
- Daniel L. Stufflebeam, Director, Evaluation Center and Professor of Educational Leadership, Western Michigan University

Research Assistants:
- Elizabeth Gilson, Graduate Student, Ohio State University
- Susan Kensinger, Graduate Student, Ohio State University

Contributing Researcher:
- Robert Rodosky, Graduate Student, Ohio State University and Evaluation Specialist, Columbus, Ohio Public Schools

Classroom Observation Team:
- Jerry Denny, Assistant Dean for Graduate Programs, University of Illinois
- Barbara Grandon, Elementary Teacher, Scioto Downs, Ohio School District
- Marilyn Suydam, Professor, Mathematics Education, Ohio State University
- Arthur White, Professor, Science Education, Ohio State University

Supplemented by:
- Miriam Brierly, Evaluation Specialist, Columbus, Ohio Public Schools
- Dwayne Channell, Mathematics and Science Education Department, Ohio State University
- Joe Crosswhite, Chair, Mathematics and Science Education, Ohio State University
- Peg Kasten, Mathematics and Science Education Department, Ohio State University
- Diane Thomas, Mathematics and Science Education Department, Ohio State University
- Margaret Wehner, Evaluation Specialist, Columbus, Ohio Public Schools

Site Visitation Team:
- George Mallinson, Distinguished Professor of Education, Western Michigan University
- Richard Munsterman, Associate Professor of Educational Leadership, Western Michigan University
- Charles Warfield, Associate Professor of Educational Leadership, Western Michigan University
- Donald Weaver, Director, Community Education Development Center and Professor of Educational Leadership, Western Michigan University

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- Randy Demaline, Graduate Student, Evaluation Center, Western Michigan University
- Marjorie Hershisier, Graduate Student, Evaluation Center, Western Michigan University

Clerical Support, Business Management:
- Klazina Johnston, Secretary, Evaluation Center, Western Michigan University
- Karen Wentland, Secretary, Evaluation Center, Western Michigan University
- Carolyn Williams, Secretary, Evaluation Center, Western Michigan University
APPENDICES

A STUDY OF SCHOOL WITHOUT SCHOOLS:
THE COLUMBUS, OHIO PUBLIC SCHOOLS
DURING THE NATURAL GAS SHORTAGE,
WINTER, 1977

James R. Sanders
Daniel L. Stufflebeam

Evaluation Center
Western Michigan University
December, 1977

Acknowledgement and Disclaimer

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### APPENDICES

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APPENDIX A

ORIGINAL PROPOSAL
Need for the Study

Emergencies, whether they are social, economic, or environmental in origin, often impact seriously on a school district's operations. Examples are when school districts are forced to close their doors because of failure to pass a board issue, natural disasters -- such as floods, or social upheaval.

The interruption of school operations has serious implications for science education. Students are left without systematic support for developing their knowledge of natural science, mathematics and social science. Parents must assume new responsibilities for their offspring's science education. And science educators must decide how they can cope with the particular emergency.

This latter challenge becomes more complex, but also more tractable when school districts decide to continue their programs in spite of the emergency. Then science educators must determine how they can organize, deliver, and manage instruction, and how they can interact with students outside of their usual classrooms and laboratories. Moreover, they must be able to demonstrate to their clients whether a high quality of science education practice has been maintained.

At present science educators have little guidance about the best ways to deliver science education outside the normal school structure. They are not certain that it's even a good idea to try.
They must develop insight into these complex issues, because school closings are an increasingly frequent phenomenon. One way of overcoming this lack of knowledge is to learn from the experiences of educational institutions that attempt to continue to perform their functions even when students and teachers are closed out of their buildings.

A timely opportunity for conducting such "crisis research" is one that arises out of the closing of schools in Ohio during the 1976-77 school year. This closing is due to the shortage of natural gas in combination with sustained extreme cold temperature. Inspite of the necessity of closing its school buildings, the Columbus Public Schools have decided to conduct "School Without Schools" and they have invited the Western Michigan University Evaluation Center to study their attempt to do this.

This invitation, we believe, deserves a prompt response. Columbus is making an extensive effort to continue to deliver educational services, and the community is immersed in the effort. Teachers have been kept on the payrolls and are developing audio visual instructional materials for use via the public media and are meeting students at least weekly outside the schools. The TV and radio stations are allocating in excess of 20 hours of TV and radio time daily for the delivery of lectures and demonstrations. The Ohio Department of Education is producing recordings of the lectures and making these available to students. The local newspaper has created an education supplement which carries daily assignments, and the churches have opened their doors so that teachers and students can meet at least weekly. Moreover, school districts throughout western Ohio, which like Columbus have had to close their doors, are planning to use the Columbus TV and radio broadcasts.
There is much that might be learned from this massive effort at alternative education. Are the students continuing to learn? Does the program work better in some subject areas than in others, at some grade levels than at others, and for some kinds of students than for others? Can students learn physics and chemistry outside their school laboratories? What are the costs and benefits to the families of students, the school district and the community? How was Columbus able to mount the program? What can we conclude from the Columbus experience about the contingency plans that districts and science education departments might develop and hold in readiness in case of a shut down? How do those involved in and affected by the program judge its worth? Any insight that can be gained regarding the answers to these and related questions will undoubtedly be of national significance and of particular help to the science educator.

Goals

It is therefore proposed that a study be undertaken immediately to achieve the following objectives:

(1) to describe the social, political, and educational context within which the alternative program is being offered;

(2) to characterize and assess the design of the alternative educational system, with particular attention to the programming that has been done in the areas of mathematics, natural science, and social science;

(3) to describe the extent that the design for the alternative program is being implemented and, in particular, to describe how science education is being provided;

(4) to identify effects on students, families, the Columbus School District, and the Columbus community;

(5) to obtain judgments of the worth of the alternative education program from students, teachers, and parents; and
(6) to ascertain the extent that districts outside of Columbus make use of the Columbus District's alternative education program.

Research Plan

The study of the Columbus plan must be both responsive to local school district information needs and provide data of interest to educators across the nation. Although it is impossible to predetermine all the local information needs at this time, questions of both local and national interest can be projected. It is these questions that will determine the design of the study.

Table 1 contains a list of questions, and research strategies to answer each question, for the study. Together these questions define a set of criteria that best represent the interests of both local and national audiences, in the judgment of the investigators. New questions may be added to the list once the study begins.

The design for the study can be described as a multiple-method investigation of a program for which multiple criteria are appropriate. Each method proposed in Table 1 has been selected as the best strategy for addressing the associated question or criterion based on considerations of validity and feasibility.

Because the Columbus School District has invited the study, cooperation in sample selection will not be a problem. Sampling procedures and sample sizes will be determined in cooperation with the evaluation staff of the District.

Data resulting from the use of each research strategy will be compiled in tabular or narrative form and reported to selected audiences of the study according to their information interests. Reporting audiences will
### Table 1

#### Design for the Evaluation Effort

<table>
<thead>
<tr>
<th>Questions</th>
<th>Research Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What instructional/affective effects can be inferred from the change?</td>
<td>1. Time series; administration of objectives; referenced tests; teacher judgment; results of regular testing program.</td>
</tr>
<tr>
<td>2. What effects on family life result from the change?</td>
<td>2. Survey interviews with parents, students; unsolicited comments.</td>
</tr>
<tr>
<td>3. What effects on social life/socialization of students result from the change?</td>
<td>3. Survey interviews with parent, students; teacher judgment (upon return of students to classes).</td>
</tr>
<tr>
<td>4. Is the new program instructionally sound?</td>
<td>4. External panel of reviewers; internal self-study committee.</td>
</tr>
<tr>
<td>5. To what degree do students participate in instruction?</td>
<td>5. Survey observation in homes; survey interviews.</td>
</tr>
<tr>
<td>6. (a) How does the new curriculum differ from the old?</td>
<td>6. (a) Structured comparative curriculum analysis.</td>
</tr>
<tr>
<td>(b) Is it implemented as planned?</td>
<td>(b) Process monitoring using program design as the standard.</td>
</tr>
<tr>
<td>7. What is the cost of the new program compared to regular program (line comparison)?</td>
<td>7. Cost analysis by district staff.</td>
</tr>
<tr>
<td>8. Is the new program credible?</td>
<td>8. Survey interviews with relevant segments of the population; collection of comments through media coverage, other documents; use anthropological consultant.</td>
</tr>
<tr>
<td>9. (a) Program description -- plan, procedures, facilities and equipment, personal use, problems in implementation.</td>
<td>9. (a) Collect documents, interview district administrators, program directors - collect enough information so that another district could implement the plan if they desired.</td>
</tr>
<tr>
<td>(b) What went on between beginning and end of the program?</td>
<td>(b) How did teachers, parents, students spend their time -- a scenario.</td>
</tr>
<tr>
<td>10. Is the program in violation of any laws, any contracts?</td>
<td>10. Analysis of school law, union contract and program procedure.</td>
</tr>
</tbody>
</table>
include, but not be limited to the following: Columbus School District administrators, teachers and school board; citizens of Columbus, Ohio; NSF; other national education agencies; the national public; the education research community; and education policy makers. Media for communicating the findings of the study will include the local and national press, television, radio, written technical reports, and meetings with relevant audiences.

Schedule of Activities

Table 2 contains a projected time schedule with ending dates for each project activity by personnel involved with each activity. The categories of project personnel listed in the Table are as follows:

Co-Principal Investigators - Dr. Daniel L. Stufflebeam, Director of the Evaluation Center at Western Michigan University and Dr. James R. Sanders, Associate Director of the Center, will serve as project directors.

Resident Researcher - A researcher who is already located in Columbus, Ohio will be identified and hired to serve on the project staff during the period covered by the study.

Expert Panel - A team of external investigators, including an ethnographer, a media technologist, a curriculum expert, and a social scientist will be identified and hired to take an intensive look at the new Columbus system.

Resident Secretary - An on-site clerical support person will be hired to provide necessary clerical assistance.

Evaluation Center Clerical and Technical Staff - Support personnel from the Evaluation Center at Western Michigan University will be hired and assigned to certain project activities as indicated in Table 2.
<table>
<thead>
<tr>
<th>Projected Ending Date</th>
<th>Co-Principal Investigator</th>
<th>Resident Researcher</th>
<th>Co-Principal Investigator</th>
<th>Expert Panel</th>
<th>Resident Secretary</th>
<th>Evaluation Center</th>
<th>Evaluation Ctr. Tech. Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>2/15/77</td>
<td>Visit Columbus to lay groundwork.</td>
<td></td>
<td>Visit Columbus w/ Coordinator. Move to Columbus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2/21/77</td>
<td>Recruit staff</td>
<td>Establish &amp; maintain document bank.</td>
<td>Interview leaders; observe activities &amp; prepare visitation schedule for expert panel.</td>
<td></td>
<td>Review materials.</td>
<td>for visiting &amp; resident researcher.</td>
<td>Aid coordinator in recruitment.</td>
</tr>
<tr>
<td>2/23/77</td>
<td>Serve as a member of review panel.</td>
<td>Support expert panel's visit. Administer survey forms.</td>
<td>Support expert panel's visit. Interview &amp; observe.</td>
<td></td>
<td>Visit Columbus to interview &amp; observe; write reports.</td>
<td>Support expert panel's visit.</td>
<td>Type trip reports.</td>
</tr>
<tr>
<td>2/25/77</td>
<td>Prepare &amp; provide interim report to Columbus.</td>
<td>Support visiting researcher.</td>
<td>Develop visiting researcher's report. Prepare visitation schedule for expert panel.</td>
<td></td>
<td>Visit Columbus to interview &amp; observe; visiting researchers.</td>
<td>Support expert panel's report.</td>
<td>Type visiting researcher's report.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Type expert panel's report.</td>
<td>Edit expert panel's report.</td>
</tr>
<tr>
<td>Projected Ending Date</td>
<td>Co-Principal Investigator</td>
<td>Resident Researcher</td>
<td>Co-Principal Investigator</td>
<td>Expert Panel</td>
<td>Resident Secretary</td>
<td>Evaluation Center Clerical Staff</td>
<td>Evaluation Ctr. Tech. Staff</td>
</tr>
<tr>
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</tbody>
</table>
APPENDIX B

ENTRY INTERVIEW QUESTIONS
AND INTERVIEWEES
ENTRY INTERVIEW QUESTIONS

1. What are the important issues in studying this program? Why should anyone look at it? Where should we be looking?

2. (a) In what respect has the program been a success, not been a success; what is your overall judgment?
   
   (b) What ingredients made it go?

3. What might be changed to make it better?

4. What changes were made as you gained experience?

5. What are the salient features of the program?

6. Who are the top 5-10 actors in the program and what do they do?

7. Is the full curriculum being continued in the program? What has dropped? Why? What has crisis done to the teaching of science? Math? Social Studies?

8. What new things are being done that should be continued?

9. What student benefits are evident?
   
   parent problems
   
   teacher

10. Is this the way other districts should go when schools are closed? Will it always work? What would you recommend to others?
11. Who do we see to get it?
   sampling frames, mailing labels
   ongoing studies
   testing schedules
   cost data
   daily schedules
   curriculum materials, media storage
   class objectives and achievement data
   how teachers, students spend their time

12. What else might Columbus have done? How would you rate the alternatives?

13. What is your judgment about the expense of the program?

14. What do you think about long range impact on Columbus Public Schools will be?

15. Is your judgment what is the most representative high school in the district?

16. What kind of phone calls have come to the central administration?

17. Is anyone monitoring gas across the city?

18. What contacts have teachers been making? How are students participating on other than assigned school days?
ENTRY INTERVIEWEES

Columbus Public Schools
- J. Ellis
- H. Merriman
- J. Davis
- E. Luckey
- D. Davis
- M. Brierly
- C. Smith
- M. Wehner
- R. Coldren
- B. Bowen

Columbus Education Association
- J. Borgess

Columbus Catholic Diocese
- F. Sorahan

Columbus Community Leaders
- E. DiAngelo
- J. Moskus
APPENDIX C

PROJECT PERSONNEL
PROJECT PERSONNEL

Co-Principal Investigators:

James R. Sanders, Associate Director Evaluation Center and Associate Professor of Educational Leadership, Western Michigan University

Daniel L. Stufflebeam, Director Evaluation Center and Professor of Educational Leadership, Western Michigan University

Research Assistants:

Elizabeth Gilson, Graduate Student, Ohio State University

Susan Kensinger, Graduate Student, Ohio State University

Contributing Researcher:

Robert Rodosky, Graduate Student, Ohio State University and Evaluation Specialist, Columbus, Ohio Public Schools

Classroom Observation Team:

Terry Denny, Assistant Dean for Graduate Programs, University of Illinois

Barbara Grandon, Elementary Teacher, Scioto Downs, Ohio School District

Marilyn Suydam, Professor, Mathematics Education, Ohio State University

Arthur White, Professor, Science Education, Ohio State University

Supplemented by:

Miriam Brierly, Evaluation Specialist, Columbus, Ohio Public Schools

Dwayne Channell, Mathematics and Science Education Department, Ohio State University

Joe Crosswhite, Chairman, Mathematics and Science Education, Ohio State University

Peg Kasten, Mathematics and Science Education Department, Ohio State University

Diane Thomas, Mathematics and Science Education Department, Ohio State University
Margaret Wehner, Evaluation Specialist, Columbus, Ohio
Public Schools

Site Visitation Team:

George Mallinson, Distinguished Professor of Education,
Western Michigan University

Richard Munsterman, Associate Professor of Educational
Leadership, Western Michigan University

Charles Warfield, Associate Professor of Educational Leadership,
Western Michigan University

Donald Weaver, Director, Community Education Development Center
and Professor of Educational Leadership, Western Michigan
University

Data Analysts:

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Western Michigan University

Marjorie Hershiser, Graduate Student, Evaluation Center,
Western Michigan University

Clerical Support, Business Management:

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Karen Wentland, Secretary, Evaluation Center, Western Michigan
University

Carolyn Williams, Secretary, Evaluation Center, Western
Michigan University
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616-525-9412
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616-333-8155

Daniel L. Stufflebeam
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Kalamazoo, Michigan 49009
616-335-3256
616-333-8155
or
Dept. Eval. Research and Planning
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Columbus, Ohio 43215
614-225-2296

Marilyn K. Suydam
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Columbus, Ohio 43220
457-7254
or
1200 Chambers Rd.
Columbus, Ohio 43212
422-6717

Peg Wahner
271 Irving Way
Columbus, Ohio 43214
267-2913
or
Columbus Public Schools
52 Starling St.
Columbus, Ohio 43215
225-2235

Art White
475 Riley Ave.
 Worthington, Ohio 43085
614-866-2915
or
Arps Hall - 252
1946 11th High St.
Ohio State University
Columbus, Ohio 43210
514-292-4275

514-292-5777 (FAX)

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APPENDIX D

INSTRUCTIONS GIVEN TO THE
CLASSROOM OBSERVATION TEAM AND TO
THE SITE VISITATION TEAM
INSTRUCTIONS GIVEN TO THE
CLASSROOM OBSERVATION TEAM

1. Team Members 1 Days Scheduled

Terry Denny, U. of Illinois
Barbara Grandon, Scioto Darby School District (Elem.)
Marilyn Suydam, Ohio State Univ. (Math)
Arthur White, Ohio State Univ. (Science)

Part Time:
Joe Crosswhite, Ohio State Univ. (Science)
Miriam Brierley, Columbus Public Schools (Eval.)
Peg Wehner, Columbus Public Schools (Eval.)
Liz Gilson, Ohio State Univ.
Sue Kensinger, Ohio State Univ.

2. Purpose of the Panel

-observe, listen, interview what science education is doing
-portray the story of science education in the program, describe
-conceptualization of instruction, teaching process and decision-
-making process
-place in historical context; in context of normal curriculum
-portray concerns, issues, discussions inside and outside of
class
-record what the student and the teacher are doing, appear to
be thinking
-record this experience in a usable form and prepare a 1000-2000
word report

3. Potential issues, questions

-What emphasis, change in emphasis has occurred in the curriculum?
-What did they teach? Was it new, enrichment review?
-What different teaching methods have been used during the
  3 weeks (catalog and describe); what material was used?
-How have teachers organized for teaching? Scheduled, used field
  trips, radio, T.V., special meetings, time periods, change
  laboratory routines, done testing?
-What role changes have occurred for teachers?
-Do teachers felt uneasy due to the new freedom? Have they taken
  advantage of it?
-Have students felt uneasy due to the new freedom? How have they
  reacted?
-What variability do you see among teachers, within classrooms
  (e.g., use of T.V.) over grades, across schools?
-Is there any unrest developing among teachers, students (e.g., with
  the old way of doing things, with the school without schools)?
-What decisions had to be made by teachers—what did they decide—
  how did they decide? Could they have used more help? What?
-How have changes in setting affected the lives of teachers and
  students; affected instruction?
-Are teachers concerned with anything? Students concerned?
4. Procedures

1. Follow itinerary
2. Introduce self to teachers, briefly describe your purpose: to portray the "School Without Schools" program--requested by the school system, would like to listen and learn and talk later if possible.
3. Be unobtrusive
4. Take notes or record observations in some other usable way--so someone else can comprehend them
5. Write up within a week and send typed report to us at Starling Street office, 225-2896
6. We will have forms for you to fill out for payment next week
7. Next meeting: Monday dinner, February 21, 6:30 P.M. at Stauffer's University Inn

Emergency Phone: WMU Emergency Research Project
52 Starling Street
Columbus, Ohio 43215
(614) 225-2896
<table>
<thead>
<tr>
<th>AREA</th>
<th>SCHOOL</th>
<th>CONTACT PERSON</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Studies</td>
<td>Mohawk J-SH</td>
<td>Flannigan, Teacher</td>
</tr>
<tr>
<td></td>
<td>Indianola Jr.H.</td>
<td>Schmidt, Teacher</td>
</tr>
<tr>
<td></td>
<td>South SH</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Franklin Jr.H.</td>
<td>J. Sauer, Dept. Chr.</td>
</tr>
<tr>
<td></td>
<td>Eastgate Elem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Starling Jr. H.</td>
<td>M. Rotonud</td>
</tr>
<tr>
<td>Science</td>
<td>Hilltonia Jr. H.</td>
<td>H. Hord, Principal</td>
</tr>
<tr>
<td></td>
<td>Buckeye Jr. H.</td>
<td>C. Psaltzgraph, Principal Rm. 209</td>
</tr>
<tr>
<td></td>
<td>Woodward Park, Jr. H.</td>
<td>R. Woodford, Rm. 303</td>
</tr>
<tr>
<td></td>
<td>McGuffey Jr. H.</td>
<td>A. Morris, Dept. Chr.</td>
</tr>
<tr>
<td></td>
<td>North S.H.</td>
<td>H. Nicklaus, Principal</td>
</tr>
<tr>
<td></td>
<td>Northland, S.H.</td>
<td>B. Vogely, Teacher</td>
</tr>
<tr>
<td>Math</td>
<td>McGuffey Elem</td>
<td>P. Barker, Principal Office</td>
</tr>
<tr>
<td></td>
<td>Ridgeview Jr. H.</td>
<td>T. Dent, Dept. Chr.</td>
</tr>
<tr>
<td></td>
<td>Southmoor Jr. H.</td>
<td>P. Sherer, Dept. Chr.</td>
</tr>
<tr>
<td></td>
<td>Brookhaven S.H.</td>
<td>F. McCaw, Principal</td>
</tr>
<tr>
<td></td>
<td>Northland S.H.</td>
<td>E. Feltz, Dept. Chr.</td>
</tr>
<tr>
<td></td>
<td>Central S.H.</td>
<td>C. Cardasis, Teacher</td>
</tr>
<tr>
<td></td>
<td>Eastmoor Jr. H.</td>
<td>R. Tata, Dept. Chr.</td>
</tr>
<tr>
<td>Social Studies</td>
<td>Forest Park Elem.</td>
<td>R. Miller, Dept. Chr.</td>
</tr>
<tr>
<td>Science</td>
<td>Walford Elem</td>
<td>M. Stinson, Principal Office</td>
</tr>
<tr>
<td></td>
<td></td>
<td>R. Hayes, Principal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>K. R. Paul, Principal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Diane Burwitz, Principal</td>
</tr>
<tr>
<td>Team Member</td>
<td>Tuesday</td>
<td>Wednesday</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>1. Terry Denny</td>
<td>South SH (at East)</td>
<td>Eastgate Elem. Franklin JH (both at East)</td>
</tr>
<tr>
<td>3. M. Suydam (Sec. Math)</td>
<td>Northland SH Central</td>
<td>Medina JH (at North) Dominion JH (at Crestview)</td>
</tr>
<tr>
<td>4. A. White (Sec. Science)</td>
<td>North</td>
<td></td>
</tr>
<tr>
<td>5. J. Crosswhite. (Sec. Math)</td>
<td>Brookhaven SH (at Linden McKinley)</td>
<td></td>
</tr>
<tr>
<td>7. Peg Wehner (Sec. Science) Contact Persons</td>
<td>Northland SH.</td>
<td>Woodward Park JH (at Northland)</td>
</tr>
<tr>
<td>8. S. Kensinger Small group for T.W.</td>
<td>COSI</td>
<td>Art Gallery</td>
</tr>
<tr>
<td>9. L. Gilson</td>
<td>Public Libraries</td>
<td>City Park and Recreational Facilities</td>
</tr>
<tr>
<td>10. George Mallinson</td>
<td>Forest Park and Waldorf (at Beecroft) Crestview JH</td>
<td></td>
</tr>
</tbody>
</table>
INSTRUCTIONS GIVEN TO THE SITE VISITATION TEAM

Columbus, Ohio "School Without Schools" Project

Interview Questions

We need to know the answers to the following questions. Specific assignments will be given during our orientation meeting.

I. Questions That Investigate the Social, Political, and Educational Context:

1. What factors led to the development of the program?

2. What are the key issues that now attend the program?
   a. Which ones should receive major attention in this study?
   b. Are there any important side issues?

3. Is the program in violation of any laws or contracts?

4. What community resources were potentially available to support education in Columbus?
   What was their level of involvement prior to the program?

5. Are there any student needs to which SWS is particularly responsive?

6. Are there any student needs that are poorly served by SWS?

7. What are the main strengths and weaknesses of the curriculum, as revealed by SWS?

8. Has SWS uncovered any particularly strong or weak capabilities of the CPS?

9. What is the likelihood of future shutdowns due to the gas shortage?

II. Questions That Characterize and Assess the Design of SWS:

1. How was Columbus able to mount the program?

2. Who were the key actors? What did they do?

3. What preconditions, assumptions, and working agreements were established? Were they sound?

4. What curricular choices as to content and method were made? Were they sound?

5. What budget was allocated? Was it adequate?

6. Is the new curriculum instructionally sound?

7. How does the new curriculum differ from the old?

8. What is the cost of the program compared to the regular program?
9. Is the new curriculum credible?

10. How can SWS be characterized re content, method, facilities, cost, and organization?

III. Questions That Assess Implementation:

1. Does the program work better in some subject areas than other?
   a. At some grade levels better than others?
   b. For some students better than others?

2. To what degree do students participate in instruction?

3. Is the SWS being implemented as planned?

4. What went on between the beginning and end of the program?

IV. Questions That Assess Effects on Students, Families, Columbus School District District, and Community:

1. Are the students continuing to learn?

2. Can students learn physics and chemistry outside their school laboratories?

3. What are the costs and benefits to the families of students, the school district, and the community?

4. How do those involved in, and affected by, the program judge its worth?

5. What effects on family life have resulted from SWS?

6. How has SWS affected the socialization of students?

7. How has SWS affected teachers?

V. Questions that Consider the Future Implications of SWS:

1. What can we conclude from the Columbus experience about the contingency plans that districts and science education departments might develop and hold in readiness in case of a shutdown?

2. What steps must be implemented to develop and implement SWS?

3. How likely is it that SWS type programs will have to be operated in the future?

4. What are the implications for the school calendar of the SWS experience?
APPENDIX E

NEWSPAPER SURVEY FORM
COMMUNITY SURVEY

1. Please (✓) as appropriate.
   ___ student
   ___ teacher
   ___ parent of student
   ___ school principal
   ___ school district administrator or supervisor
   ___ Taxpayer with no children in Columbus Schools
   ___ Columbus
   ___ Private school
   ___ high school
   ___ junior high school
   ___ middle school
   ___ elementary school
   ___ Other district
   ___ Parochial school

2. What exciting, interesting, or unusual things occurred during School Without Schools?

3. What feature or activities of School Without Schools do you think we should consider for continuation in some way in the future?

4. Many school systems had to close down completely. As an alternative, I think the Columbus Public Schools "School Without Schools" program has been:
   □ Very successful
   □ Moderately successful
   □ Successful
   □ Unsuccessful

5. Please indicate which of the following School Without Schools experiences you had some contact with or observed:
   A. □ Field trips
   B. □ Meeting as a class in a school with the regular teacher
   C. □ Meeting outside the school with the regular teacher
   D. □ TV instruction
   E. □ Radio instruction
   F. □ Newspaper instruction (Classroom Extra)
   G. □ Working at home on assignments
   H. □ Other (Please describe:)

Which of the above were the most effective?
6. Please indicate which of the following school subjects you observed or had contact with during "School Without Schools." Indicate for each subject checked, how often you had contact with it during the 15 day project.

<table>
<thead>
<tr>
<th>Subject</th>
<th>How Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Reading</td>
<td></td>
</tr>
<tr>
<td>B. Science (general, biology, chemistry, physics)</td>
<td></td>
</tr>
<tr>
<td>C. Social studies (history, geography)</td>
<td></td>
</tr>
<tr>
<td>D. Math</td>
<td></td>
</tr>
<tr>
<td>E. English, literature</td>
<td></td>
</tr>
<tr>
<td>F. Physical education</td>
<td></td>
</tr>
<tr>
<td>G. Health</td>
<td></td>
</tr>
<tr>
<td>H. Art and Music</td>
<td></td>
</tr>
<tr>
<td>I. Language Arts</td>
<td></td>
</tr>
<tr>
<td>J. Career awareness, career education</td>
<td></td>
</tr>
<tr>
<td>K. Foreign language</td>
<td></td>
</tr>
<tr>
<td>L. Vocational education</td>
<td></td>
</tr>
</tbody>
</table>

Which of the ones you've checked were handled most adequately?  
Which of the ones you've checked should have had more time?

7. What community needs were met by the "School Without Schools" program?
APPENDIX F

MAIL SURVEY FORMS, COVER LETTER, FOLLOW-UP LETTER
MEMORANDUM

TO: A Selected Group of Parents
FROM: The Columbus Public Schools
DATE: April 25, 1977

You are one of a selected few whom we are asking for advice. Although we have received many comments on the School Without Schools Program during February, we still don't know for sure how it went or whether it should be tried in some form again next year. We are asking you and a very few others to represent Columbus by giving us advice. We intend to take your responses to our questions very seriously in our report on the School Without Schools.

Please take a few minutes to fill out the enclosed form and return it in the enclosed envelope. If you fill it out right away, you are likely not to forget—and it doesn't take much time.

Because you are one of only a selected few whom we are asking for advice, we have attached a number to the form indicating your identification. This is only for a follow-up contact with you in case we don't hear from you. We will tear off the identification number once we receive a completed form from you. You can be sure that your identity will not be associated with your responses and the community report we produce will completely preserve your anonymity.

This is important to us, to Columbus, and to other communities that want to learn about the School Without Schools Program. We wish to thank you for your assistance.

j
Please answer the following questions about the School Without Schools Program and return this form in the attached stamped envelope.

Thank you, in advance, for your time and effort.

1. Number of children attending Columbus Public Schools: ____________

2. How did School Without Schools affect your life?

3. Did School Without Schools change your attitude toward the Columbus Public Schools? (Circle one)
   - Yes
   - No
   If yes, in what way?

4. To what extent was the School Without Schools a success? (Circle one)
   - Very successful
   - Very unsuccessful
   1 2 3 4 5

5. Approximately how many hours per day in a typical week during School Without Schools did your child receive education from the following sources? (Write in the number of hours for each day of the week for only those sources that apply.)

<table>
<thead>
<tr>
<th>Source</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field Trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting as a class in a school with the regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting outside the school with the regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Getting help from you</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working at home on assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

524
6. (a) Next winter, suppose there will be no energy problem and the schools have plenty of gas. Which of the following would you prefer? (Check ✓ one)

___ School during the winter as usual
___ Some form of School Without Schools in February

(b) If you checked the second option, which of the following would you want to see included? (Check ✓ all that apply)

___ Field trips
___ Meeting as a class in a school with the regular teachers
___ Meeting outside the school with the regular teacher
___ TV instruction
___ Radio instruction
___ Newspaper instruction
___ Working at home on assignments
___ Other (please describe) ____________________________________________

7. I have become more aware of the school programs in Columbus as a result of this crisis? (Circle one)

        Yes            No
MEMORANDUM

TO: A Selected Group of Students
FROM: The Columbus Public Schools
DATE: April 25, 1977

You are one of a selected few whom we are asking for advice. Although we have received many comments on the School Without Schools Program during February, we still don't know for sure how it went or whether it should be tried in some form again next year. We are asking you and a very few others to represent Columbus by giving us advice. We intend to take your responses to our questions very seriously in our report on the School Without Schools.

Please take a few minutes to fill out the enclosed form and return it in the enclosed envelope. If you fill it out right away, you are likely not to forget—and it doesn't take much time.

Because you are one of only a selected few whom we are asking for advice, we have attached a number to the form indicating your identification. This is only for a follow-up contact with you in case we don't hear from you. We will tear off the identification number once we receive a completed form from you. You can be sure that your identity will not be associated with your responses and the community report we produce will completely preserve your anonymity.

This is important to us, to Columbus, and to other communities that want to learn about the School Without Schools Program. We wish to thank you for your assistance.
Please answer the following questions about the School Without Schools Program and return this form in the attached stamped envelope. Thank you, in advance, for your time and effort.

1. Your current grade level: _______ grade

2. Your age: _______ years

3. How many hours per day in a typical week did you work on schoolwork during School Without Schools using the following types of schoolwork? (Write in the number of hours for each day of the week for only the types of schoolwork that you used.)

<table>
<thead>
<tr>
<th>Types of Schoolwork</th>
<th>M</th>
<th>Tu</th>
<th>W</th>
<th>Th</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field trips</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting as a class in a school with your regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meeting outside the school with your regular teacher</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Newspaper instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Working at home on assignments</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other (please describe)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. How did your assignments in each of the following subjects during School Without Schools compare with your regular program? (Circle one for each subject.)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Much lighter</th>
<th>Lighter</th>
<th>Same</th>
<th>Heavier</th>
<th>Much heavier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Reading, Language, English</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Science</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Social Studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
5. How did you feel about returning to school full time after School Without Schools? (Circle one)

<table>
<thead>
<tr>
<th>Very happy</th>
<th>Normal</th>
<th>Very sad</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

6. To what extent was the School Without Schools a success? (Circle one)

<table>
<thead>
<tr>
<th>Very successful</th>
<th>Very unsuccessful</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

7. Next year, suppose there is no energy problem and the schools have plenty of gas. Which of the following would you prefer? (Check one)

- School during the winter as usual
- Same form of School Without Schools in February

If you checked the second option, which of the following would you want to see included? (Check ✓ all that apply)

- Field trips
- Meeting as a class in a school with the regular teacher
- Meeting outside the school with the regular teacher
- TV instruction
- Radio instruction
- Newspaper instruction
- Working at home on assignments
- Other (please describe)
MEMORANDUM

TO: A Selected Group of Teachers
FROM: The Columbus Public Schools
DATE: April 25, 1977

You are one of a selected few whom we are asking for advice. Although we have received many comments on the School Without Schools Program during February, we still don't know for sure how it went or whether it should be tried in some form again next year. We are asking you and a very few others to represent Columbus by giving us advice. We intend to take your responses to our questions very seriously in our report on the School Without Schools.

Please take a few minutes to fill out the enclosed form and return it in the enclosed envelope. If you fill it out right away, you are likely not to forget—and it doesn't take much time.

Because you are one of only a selected few whom we are asking for advice, we have attached a number to the form indicating your identification. This is only for a follow-up contact with you in case we don't hear from you. We will tear off the identification number once we receive a completed form from you. You can be sure that your identity will not be associated with your responses and the community report we produce will completely preserve your anonymity.

This is important to us, to Columbus, and to other communities that want to learn about the School Without Schools Program. We wish to thank you for your assistance.
School Without Schools Report

Please answer the following questions about the School Without Schools Program and return this form in the attached stamped envelope. Thank you, in advance, for your time and effort.

1. School ________________ 2. Your age ________________ years.

3. What grade(s) do you currently teach? ________________ grade(s)

4. If applicable, what subject(s) do you currently teach?

5. What communication channels did you find to be most effective for getting information about School Without Schools while the program was operating?

- grapevine
- staff meetings
- memos from the principal
- the central administration's Handbook for School Without Schools
- radio and/or TV
- personal conversations with administrators
- newspaper
- other, please specify

6. (a) In what way, if any, did you deviate from your normal curriculum during School Without Schools?

- covered same material I would have covered
- omitted the following material
- covered different material
- took more field trips than I would have taken

(b) Please identify special content and teaching methods you used during School Without Schools:

7. Please describe briefly how you spent each week during School Without Schools:

   Week of February 7
   
   Week of February 14
   
   Week of February 21

  530
8. (a) What did you find about pupil progress in each of the following areas: (Circle one for each area)

<table>
<thead>
<tr>
<th>Area</th>
<th>Below Normal</th>
<th>Normal</th>
<th>Way Above Normal</th>
<th>Didn't Teach This</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Health</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>b. Mathematics</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>c. Reading, Language</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Arts, English</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>d. Science</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>e. Social Studies</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(b) What is your primary basis for this estimate? (Check one)

- [ ] test results
- [ ] observation of pupils
- [ ] other (please specify) ____________________________

9. What were the important advantages and disadvantages of School Without Schools?

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>1.</td>
</tr>
<tr>
<td>2.</td>
<td>2.</td>
</tr>
<tr>
<td>3.</td>
<td>3.</td>
</tr>
</tbody>
</table>

10. Approximately what percent of your time was spent teaching in each of the following subject areas during School Without Schools?

- Health ______ % of time
- Mathematics ______ % of time
- Reading, Language Arts, English ______ % of time
- Science ______ % of time
- Social Studies ______ % of time
11. Approximately what percent of your time is normally spent teaching in each of the following subject areas?

Health _____ % of time
Mathematics _____ % of time
Reading, Language Arts, English _____ % of time
Science _____ % of time
Social Studies _____ % of time

12. To what extent was the School Without Schools a success? (Circle one)

- Very successful
- Very unsuccessful

13. (a) Next winter, suppose there will be no energy problem and the schools have plenty of gas. Which of the following would you prefer? (Check one)

- School during the winter as usual
- Some form of School Without Schools in February

(b) If you checked the second option, which of the following would you want to see included? (Check all that apply)

- Field trips
- Meeting as a class in school with the regular teachers
- Meeting outside the school with regular teachers
- TV instruction
- Radio instruction
- Newspaper instruction
- Working at home on assignments
- Other (Please describe)

14. (a) If you favor some form of School Without Schools, for what groups would it be most appropriate? (Check all that apply)

- kindergarden
- primary
- upper grades
- junior high or middle school
- high school
- gifted students
- typical students
- mentally handicapped
- physically handicapped
- others (please specify)
14. (b) For what groups of students might SNS do more harm than good? (Check all that apply)

____ kindergarten
____ primary
____ upper grades
____ junior high or middle school
____ high school
____ gifted students
____ typical students
____ mentally handicapped
____ physically handicapped
____ others (please specify)
FROM: The Columbus Public Schools

DATE: June 3, 1977

Our records show we haven't received a completed questionnaire covering the School Without Schools Program from you. We mailed you the original questionnaire on April 25 and, very seriously, we need your assistance. A new questionnaire is enclosed, in case you have mislaid the earlier one or if it has been lost in the mail. Please take a few minutes now, complete the form, and return it in the enclosed envelope.

Because you are of a very few people being asked to supply information, your response does make a difference. Thank you, in advance, for your comments.
APPENDIX G

CASE STUDY REPORT FOR ILLINOIS STUDY
"SCHOOL WITHOUT SCHOOLS":
COLUMBUS OHIO'S EDUCATIONAL RESPONSE TO THE
ENERGY CRISIS OF 1977

James R. Sanders and Daniel L. Stufflebeam
Evaluation Center
Western Michigan University

January-February 1977
School without schools: enough in name alone to quicken the professorial heartbeat of anyone interested in the pedagogical enterprise! The Columbus story tells us how teachers were expected to and did perform in a setting for which they had received not the slightest bit of training. It should not surprise us that the teaching did not prove to be a festival of creative response to the political necessity for teaching in places other than the classroom. The teachers simply did not know the territory.

While it should be obvious to all that knowledge of subject matter has little relationship to the effectiveness of the teacher, one suspects that teacher training might aid its clients through an increase in attention paid to techniques for instructing learners in places other than the classroom.

The pattern of elementary teachers working outside of schools as they did in school is clear in the Columbus report.

Subject areas being emphasized by classroom teachers at the elementary level during School Without Schools were reading, spelling, and mathematics. Teachers reported that they had been requested by central administrators to concentrate on these basic skill areas. Some history and social studies topics were being taught, but there was very little attention given to science.
The science curriculum, especially at the elementary level, was revealed to be weak in both the School Without Schools Program and the regular school program. Science is a little-taught subject by many teachers at the elementary level.

Those at the elementary level who did teach science mainly followed a textbook.

A similar profile was charted for the secondary teachers in both science and non-science subjects.

Teachers reported that there was considerable pressure to cover material that would normally be taught during this period. Most felt that they were one to two weeks behind after regular school resumed. Teachers also were relieved that structure and rules returned to normal after School Without Schools.

The reader with a socio-anthropological bent will find the discussions of turf intriguing: "I don't want anyone coming from another school to start using MY laboratory and MY chemicals (or equipment)."

Of course the nonconformists were noted. "One biology teacher offered his students a two-week trip to Florida under his supervision; and having received about ten volunteers, packed several vans and took the group to Florida along with a couple of parent chaperones."

One of the summary items offered by Sanders and Stufflebeam wraps it all up:

We saw that School With Schools was the most effective component of the School Without Schools Program.

A decade ago Seymour Sarason studied the manner in which schools change and how we try to change them. His tenet is upheld by Sanders' and Stufflebeam's study: "The more things change in education the more they remain the same."
In 1977, Ohio, like much of the rest of the nation, experienced its coldest winter in more than a century. This fact, coupled with an acute shortage of natural gas to meet the heating needs of Ohio's industries, businesses and homes, presented a special emergency situation for all the school districts in the western half of the state. Heat levels had to be turned down in order to preserve pressure in the gas delivery system; and buildings, plants and animals in the school buildings, as well as expensive equipment, somehow had to be protected and preserved. More importantly, it was necessary in many cities in Ohio to close schools to the use of children and educators.

Rather than accept a mandated holiday for a month, the Catholic and public schools in Columbus, Ohio, decided to meet this challenge with an innovative response. They called it the School Without Schools Program. In effect, they decided to continue to pay educators to deliver education and to use the total community as the classroom for the delivery of instructional services. The community supported the Columbus schools in this program. Television and radio stations devoted more than twenty hours per day to the delivery of educational programs. Businesses and educational institutions in the area opened up their facilities to use by students and teachers. The community mounted a massive busing program to transport students to zoos, museums, libraries, industries, a police academy, and many other stimulating settings. Teachers convened their classes in homes, bank lobbies, and churches. In short, Columbus mounted, almost overnight, a total community education effort.

In the early stages of this program, the National Science Foundation decided to support a study that would describe and analyze the School Without Schools Program and assess its effects. NSF wanted to know particularly how math and science teachers responded to this type of emergency. They wanted to know what decisions had to be made in mobilizing this school district to do this program, and they wondered whether there is any merit in developing contingency plans based on the Columbus experience so that other schools might be prepared to meet a similar crisis. To address these questions, a team, based at Western Michigan University's Evaluation Center, was commissioned to conduct a study of the Columbus School Without Schools Program.

That study involved intensive efforts to gather appropriate information by various means. Experts visited Columbus both during and following the School Without Schools Program to observe it in action, to gather existing documentation, and to interview various people who were involved in, or affected by, the program. Randomly sampled groups of teachers, students, and parents were surveyed to obtain information about their experience and their perceptions of the program. Surveys were also conducted through the local newspapers; and Nielsen and Arbitron television ratings were collected and analyzed, since those ratings were taken during and following the time of the School Without Schools Program. Case materials including a television documentary, diaries and scrapbooks, and studies done by other researchers of the School Without Schools Program were collected. Hearings were conducted with teachers who taught over television; science, math and social studies teachers; and the Columbus PTA Council. People at all levels of the program, including individual parents, teachers, and students in the public schools were interviewed. Public and Catholic school administrators in area educational institutions, as well as personnel of the public media
stations and newspapers, were also interviewed. A massive amount of information bearing on the School Without Schools Program was thus amassed.

This report presents a segment of the findings, particularly those that deal with issues of math, social studies, and science teaching. Additional findings are presented in the general study report.

This report contains the authors' interpretations based on their review of a large amount of data. Citations to specific testimony and findings are presented to illustrate the main interpretations that we believe are warranted. While we attempted to choose anecdotes that would help the reader get a valid view of the background data, we realize that we could have chosen other anecdotes that would have formed a different perspective of the data. Also, the data we gathered certainly were far from the complete set that were available for collection. Overall, we gathered much data which we have attempted to distill and present here with helpful examples; we realize that our report is not complete and may be inaccurate in some unknown ways; but this report contains our best interpretations of the complex program called School Without Schools.

Observations contained in this report are presented in four sections. The first contains information about the setting and the program that was studied. The second provides a description of characteristics that were general to science, math, and social studies instruction at all levels of the Columbus Public Schools and the Catholic diocese during the School Without Schools Program. The third contains findings particularly relevant to elementary instruction, especially in science, and the fourth deals with instruction at the secondary level with an emphasis on science education.

An attempt has been made in this report to be descriptive rather than judgmental. However, it was not always possible to make this distinction because much of the data collected were people's perceptions concerning how well the program had operated.

THE SETTING AND THE PROGRAM

The Setting

Columbus, Ohio, is a capital city. According to the Columbus Area Chamber of Commerce, the population of the standard metropolitan area (1970 census) is 1,017,847. The city of Columbus itself has a population of 539,677, of which 19% is nonwhite.

The city is served by the major state university and seven other colleges and universities within the surrounding area. In addition, there are four business and technical schools of higher education in the county. Columbus is a center of cultural activity in central Ohio with five major theaters, nine community theaters, two ballet companies, professional sports, and public recreation. Fourteen musical organizations, four fine arts galleries, and a number of cultural arts centers are also found in the city. It is the second-largest city in Ohio and twenty-first largest in the United States. It is also the only major city in Ohio showing an increase in population from 1970 until 1974.

The principal employers in Columbus are the State of Ohio, the Ohio State University, the federal government, the Columbus Public Schools, two large department store chains, the City of Columbus, Western Electric Company, and Ohio Bell Telephone. The impression one gets from a visit to Columbus is that it is a growing, vibrant, midwestern city with substantial resources that contribute to the cultural and educational well being of this community. Its population is a cross-section of American society.

The Columbus Public Schools serve approximately 96,000 students in 177 school buildings, which is a drop of about 14,000 students over the last ten years. The Catholic Diocese in Columbus serves another 15,000 students. The Columbus Public Schools' budget for the school year runs about $116,000,000, of which 87.1% goes to salaries and fringe benefits.

The Columbus Public Schools have had a history of close community relations evidenced by participation of school district administrators in community service organizations such as Kiwanis. Other evidence of this close relationship includes frequent meetings between school administrators and city and state government officials, periodic and frequent media presentations by school personnel over television and radio, and the existence of central administration staff assigned specifically to communicate district information to parents, legislators, government and business leaders, the media, and representatives of community special interest groups. The school board has had a good relationship with the superintendent and his central administration staff, supporting them at almost every turn.

However, the Columbus Public Schools did face several difficult problems in 1976-77. In November, 1976, a levy failed and the levy was to have been brought up again in June, 1977. Furthermore, the school district was involved in a desegregation suit brought about by the Columbus chapter of NAACP. The racial makeup of the schools is approximately 67% white and 33% nonwhite; and although no noticeable civil disturbances existed, the black community was concerned that the distribution of students to buildings within the district had historically segregated black students. The makeup of the school board is four whites and three blacks. Several votes, especially those relevant to the desegregation issue, followed racial lines.

Factors that led up to the School Without Schools Program included weather, politics, and economics. No one had anticipated that Columbus would experience the coldest winter in more than one hundred years in 1977, and this certainly has to be pegged as the main reason for the closing of all but thirty-six of Columbus' school buildings. Backup emergency gas supplies had been made available to users by Columbia Gas during August, 1976, but the price would have been higher for this supplementary gas and its offer carried the stipulation that the more expensive gas had to be used first. Because no one could have predicted the cold winter, the school administration made a fiscally prudent decision in August not to order the supplementary supplies. By the time the crisis hit in February, 1977, Columbia Gas had released the supplementary supply and it was too late to retrieve it. There were some strong feelings that a dispute between Columbia Gas and the Ohio legislature over the former's authority to assess Ohio residents for the acquisition and storage of contingency gas supplies was another cause for unpreparedness. Many charges and counter charges were heard during the school shutdown. One such charge was that Columbia Gas has released its backup supply of natural gas in order to make the residents of Ohio realize their dependence on...
Columbus Gas for continued and adequate gas supplies during cold winters. Since the weather turned out to be much more severe than anticipated, the gas shortage was far greater than Columbia Gas officials or anyone else might have planned. Whether or not such charges are true, it was true that Columbia Gas and Columbia Transmission services were inadequate to meet the needs of Columbus and indeed of service areas through western Ohio.

The most noteworthy context factors preceding the School Without Schools Program were as follows:

a. The good relations of the Columbus Public Schools with all segments of the community—parents, city and state government leaders, science organizations, business people, media leaders;

b. The good relationship of the Columbus Public Schools' central administration with the school board and teachers' union;

c. The strong second and third level administrative staff of the Columbus Public Schools;

d. The accessibility of the state legislature;

e. The cooperation of public and parochial school administrations in Columbus;

f. The extensive community resources available for educating children outside public school buildings;

g. Prior planning for a crisis contingency program in the event schools would be shut down; and

h. The nature of the crisis—a natural disturbance (vs. a civil disturbance).

Detailed context information is provided in the general study report.

The Program

The object of the observations contained in this report was the School Without Schools Program initiated by the Columbus Public Schools in response to a mandated shutdown of facilities by the Columbia Gas Company during February, 1977. The purpose of the shutdown was to conserve quickly disappearing supplies of natural gas so that homes, necessary facilities such as hospitals, and businesses could remain open. The School Without Schools Program began its operation on February 7, 1977, and concluded on February 25, 1977. The week following the School Without Schools Program was designated as a Spring vacation. This vacation time had been originally scheduled for April, but was moved up due to the natural-gas shortages.

The design of the program was extensive and detailed. Furthermore, it was compiled and distributed to school personnel on short notice (within a week's time). Important elements of the design may be categorized as follows:

a. Communication
   - to school personnel
   - to students and parents
   - to the community

Communication efforts included: (1) The School Without Schools Handbook made available to all school personnel and supplemented with written daily bulletins; (2) a telephone hotline; (3) a war room (of telephones) for school
building personnel to arrange field trips and have questions answered; and (4) daily bulletins in the newspapers and over radio and television.

b. Program

Instruction occurred via field trips, meeting one day per week in a school building, meeting outside the school with instructors, television, radio, newspapers, and working at home on assignments.

c. Facilities

Facility maintenance was achieved via detailed mothballing procedures by district custodial staff for those buildings that were closed and via regular maintenance procedures for those buildings left open. Safety and security were prime concerns when buildings were closed. Support personnel, such as the evaluation unit in the Columbus Public Schools, were used to aid in the maintenance of facilities.

d. Transportation

Busing students for field trips and scheduling new bus routes for the one day per week in-school sessions were the main concerns in transportation. Safety of children attending school functions received considerable attention. The City of Columbus, under Mayor Tom Moody's leadership, granted $25,000 to the Columbus Public Schools to support the increased transportation expenses that were due to the School Without Schools program.

GENERAL OBSERVATIONS PERTAINING TO EDUCATION DURING SCHOOL WITHOUT SCHOOLS

The importance of contingency planning for and during crisis situations was demonstrated in the School Without Schools Program. Both the Catholic Diocese and the Columbus Public Schools, as well as the State Department of Education, had rudimentary contingency plans of various forms available. The Catholic Diocese had planned for the eventuality of being closed out of their gas-fired buildings, and had projected that they would cycle their students through the other buildings that were heated by coal and electricity. This contingency plan became a general strategy of both the Columbus Public Schools and the Catholic Diocese throughout the energy crisis. Also, the Columbus Public Schools had developed a contingency plan months prior to the energy crisis, in case of a teacher strike; and each building principal had a building plan on hand in case of emergency. Furthermore, because of the Xenia tornado of several years ago, the Ohio Department of Education had developed contingency plans for school districts in the event of environmental or social emergencies; and this agency produced a detailed plan for closing down school buildings as a specific response to the 1977 natural gas crisis.

Several findings denoted the importance of contingency planning in this Columbus emergency. Both central office and building administrators pointed to the usefulness of advance planning that had been done, as well as to the day-to-day evaluation and planning during the crisis. These administrators praised the Ohio Department of Education for their detailed plan for mothballing a school building and complained only that the plan was not made available sufficiently early during the crisis. Also, some of these administrators were critical of Columbia Gas for not having done sufficient contingency planning. Moreover, many teachers thought that the main problems in the program were due to a lack of decisive and clear guidance at the outset of the program. There was widespread agreement
that better planning earlier and clearer communication of the plans at the outset of the program could have eased many teacher, principal, and student problems and probably would have led to more consistent and extensive use of the School Without Schools Program.

There were several persons, events, and decisions that shaped the education system during School Without Schools. First, there were strong leaders in both the public and Catholic schools in Columbus. The two school superintendents were able to stimulate and manage a massive and cooperative effort between the public and Catholic schools. To support them there were strong second and third level administrators. Further, curriculum specialists developed media presentations and evaluators provided administrative support.

Second, the Columbus Public Schools immediately involved the Columbus Education Association (CEA) in all planning and decision making for the emergency program. The superintendent reported that before he took any actions, he met with the CEA director and asked him for his thoughts about the idea. The superintendent did not move until the CEA director said, "Let's go with it." Moreover, decisions about moving the Spring break from April to February and about the nature of teacher (and hence, student) involvement (eventually defined as voluntary except for the one day per week in school) had to be negotiated between the superintendent and the CEA. Teachers were expected to teach in a host school the one day per week, and were asked to be creative in pursuing learning activities, perhaps along nontraditional lines, the remainder of the time. It was agreed that no checks would be made on how teachers spent their time during School Without Schools.

Probably because of the permissiveness (voluntary nature) of the program, there was great variability in the extent to which students and teachers participated in the out-of-school portion of School Without Schools. Also, this decision may have accounted for some decrease in attendance at School Without Schools activities that proceeded from the first through the second through the third weeks of the program. Apparently, a "novelty effect" was operating during the first week and probably stimulated and sustained involvement of a great many students at first. However, this seemed to begin wearing off during the second and third weeks as more and more students stayed away from the out-of-school activities. Moreover, no particular category of students stayed away any more than any other. Several teachers at both the elementary and secondary levels commented that they were not sure how much longer than three weeks the program could be sustained.

Third, early offers of emergency help from a local commercial television and radio station, the newspapers, Ohio State University, and a few other community agencies actually started the ball rolling for the community involvement aspect of the program. Without these offers stimulating a wealth of other offers, community reaction may have been too slow to help.

Concerning the program itself, there were a number of general conclusions made by observers. First, and probably most obvious to all, teaching and learning seemed to suffer by comparison to regular programs under the School Without Schools conditions. Even though there was no intent to make School Without Schools a replacement for the regular program, a comparison did reveal deficiencies in School Without Schools that could have been overlooked. School Without Schools was seen to pose a threat to the educational well-being of the college-bound eleventh and twelfth graders who needed to maintain content coverage in preparation for college and who needed as much preparation as they could get for the coming college entrance examinations. These students also worried that a hiatus in instruction experienced in the School Without Schools Program would have a negative effect on GPA. City-wide testing results and SAT scores compiled at the end of the school year indicated that student test performance was not hurt by School Without Schools. Average performances at the grade levels that were tested showed slight gains in 1977. It appeared that there was a slowdown in instructional pace during School Without Schools, but that lost ground was made up by the end of the school year. In general, it seemed that School Without Schools
was seen by teachers and outside observers to work best at the elementary level, next best at the junior high level, and least well at the high school level. Overall, almost everyone agreed that there was nothing sufficiently compelling and desirable about School Without Schools that would warrant its repetition as a regular program. However, it was accepted as a successful emergency program.

Second, it should be noted that there were many features of School Without Schools that were constructive and viewed by most as desirable. Social integration was aided because of the integrated learning that occurred when schools came together in the few buildings that were open to the students and because of the integrated tours and other activities throughout the program. Also, School Without Schools revealed it could work well for self-directed and parental-directed learners. Considering what was seen to work best in School Without Schools, participants noted that the School With Schools portion of the program (one day per week) was the most used and most effective of all the program elements. Next in effectiveness and frequency of use were the many homework assignments that were given. The third most used and effective element seemed to be the tours, especially at the elementary level. It must be added that the tours added a little flavor of science education not found in the regular program. While the TV was the most visible part of the program and the one that received the most national acclaim, it was also one of the weakest instructional parts of the School Without Schools Program. This was not because the programming and presentations were poor, but because there was little motivation to use them or opportunity to relate them to the programming and teaching being done by individual teachers. There was little advance involvement of regular teachers in curricular decisions; and advance information about what would be on the media—which was needed by the teachers in order to plan for and use this service—was missing.

Third, the crisis evoked public services from people and agencies throughout the community. Early on there was a cooperative response and this response had a positive effect on how the community viewed itself and its schools. The Columbus Public Schools recorded the number of different non-school facilities used for instructional purposes during School Without Schools. All were used heavily. The record of use was as follows:

- Private homes: 693
- Recreation Centers: 29
- Churches: 59
- Banks: 12
- Restaurants: 28
- Fraternal: 3
- Private Recreational: 16
- Hospitals: 9
- Hotel/Motel: 4
- University/Schools: 7
- Businesses/Stores: 33
- Apartment Party Houses: 16
- Day Care/Community Centers: 39
- Federal Government: 1
- Library Branches: 17

Total: 968

Fourth, School Without Schools enhanced the public relations of the schools in Columbus. Teaching and learning were made more visible, especially on TV and radio; School Without Schools resulted in increased and improved parental involvement in education. There was clearly some creative, stimulating teaching that impressed people throughout the community. At the same time, however, the program did reveal some poor, unmotivated teaching.
Finally, the School Without Schools experience prepared school personnel in Columbus for handling emergency closings if they should occur in the future. In the area of science education alone, and just considering decisions that had to be made regarding books and equipment, the closing of buildings proved to be extremely complex. At the elementary level, all liquid chemicals had to be flushed down a sink, aquaria and aquaria filters and pumps had to be drained, living creatures needed homes, and plants and terraria required protection from the cold. Teachers had to keep records of textbooks taken home and had to monitor use of consumable workbooks. At the secondary level, in addition to the actions listed above, teachers had to find homes, and keep records, for calculators and other sensitive equipment. Every aspect of the school system required attention and responsible action by school personnel.

The most important general educational implication of the School Without Schools Program related to planning. It made apparent the importance of contingency plans at all levels of the system. It also raised again the possibility of instituting winter vacations with the addition of school days during the summer months. However, while it raised the question of winter vacations, observations also confirmed that socially such a change would be resisted by teachers and parents. Overall, School Without Schools was an interesting example of a community's collective and innovative response to a common major emergency.

**Elementary Science Education During School Without Schools**

Although not unique to science education, there were observations unique to education at the elementary level. Holding elementary sessions in secondary buildings created some problems. Facilities, such as blackboards and desks, were oversized for elementary students. The presence of high school and elementary students together created some problems for the elementary students when high school students forgot to be considerate of the little persons. There was no adequate playground for recess outside and there were no large toys for kindergarten students inside. Also, elementary teachers found it was difficult to maintain discipline with elementary students in big secondary buildings. However, in one high school cafeteria, teachers were surprised to find that it was easier to socialize elementary kids in the movable chairs and tables than in their normal classroom. Children's interest was high only in the classrooms where games were played. In classrooms where students were meeting with their teacher only once a week, interest was low and the children were restless. In many classrooms it was observed that the teacher's role was more that of a facilitator than teacher as he or she had children complete assignments or gave individual help as needed.

In many respects, School Without Schools was seen to be more appropriate for the elementary level than for either the junior high or the high school levels. One reason for this is because elementary students have a single teacher, with that teacher feeling direct and complete responsibility for a single group of children. At other levels, responsibility is diffused across several teachers for a given group of students and across several groups of students for a given teacher. Single teacher responsibility was seen as potentially much stronger than the diffused responsibility found at the secondary level as a means to promote the learning of students who are in a highly structured environment. Overall, it must be said that School Without Schools was observed to maintain instruction better at the elementary level than at the secondary level.

Methods used in elementary level classrooms during School Without Schools included question/answer discussions, teacher demonstrations, workbook assignments, and individual help. Out-of-class methods included meeting in small groups, attending to TV and radio
instruction, using the newspaper school supplement (Classroom Extra), contacting teachers by telephone, and going on field trips. Elementary teachers found their small group contacts to be quite productive. Teachers working with small groups of children in places outside the school discovered they were becoming better acquainted with their children and were teaching more material than would have been possible in the regular classroom. This was so because of the small groups of students teachers had formed. This was much different from the large group instruction most engaged in during the regular program. Some said their small group contacts were more successful than their one day in school contact. One first grade teacher found that two children who she thought were possible retentions had made so much progress during School Without Schools as a result of small group work and parental help that they would probably not be retained this year.

Transporting one's own materials or borrowing those in a host school were a particular problem that the elementary teachers faced during School Without Schools. One teacher said she had to haul three boxes of materials into the school just to teach reading, spelling, and math. Organizing for the one day in school and organizing all the material for the out-of-school assignments was found by many elementary school teachers to be a formidable task.

Subject areas being emphasized by classroom teachers at the elementary level during School Without Schools were reading, spelling, and mathematics. Teachers reported that they had been requested by central administrators to concentrate on these basic skill areas. Some history and social studies topics were being taught, but there was very little attention given to science.

The science curriculum, especially at the elementary level, was revealed to be weak in both the School Without Schools Program and the regular school program. Science is a little-taught subject by many teachers at the elementary level.

Those at the elementary level who did teach science mainly followed a textbook. A second grade teacher said she had attended grade-level science workshops for Columbus teachers and had been given all the science supplies she needed. She said all teachers had the opportunity to attend these workshops. The obvious inference was that teachers could get assistance to teach science; but that for whatever reasons, they resisted and did not use such assistance. Reasons given for not teaching science in the regular or School Without Schools Programs at the elementary level were: dislike of the textbook, dislike of a textbook approach, lack of equipment, lack of knowledge to teach science, lack of time, the need to share textbooks, and the fact that science was graded every other six weeks. The generality of these reasons cannot be judged, but it is suggested that they could be pursued as hypotheses concerning why there seems to be so little science being taught in the elementary grades of the Columbus Public Schools. Other than science-related field trips, few teachers planned science lessons for their classes. One teacher took her class to her home to learn how to care for and feed horses. Another teacher related that she had had the children play a science game patterned after a Columbus television program called "In the Know," in which students from two schools compete by demonstrating their knowledge of various topics. This teacher's questions for her "In the Know" game were based on an "out of school" science assignment.

The use of field trips was highly variable both in terms of teachers' employment of them and in terms of the purposes for which they were used. Reasons given by teachers for taking field trips were: to supplement a social studies or science lesson that had been taught before school closed, to extend science concepts, to enrich children's experiences, and to serve as motivation for discussion when school resumed. For example, one sixth grade teacher with a predominantly black class did not meet with her children for instruction outside school; but she did take small groups of students to the Center of Science and Industry, the Ohio State School for the Blind, the Black Cultural Center, the Lincoln LeVeque Tower, and the TGI Friday, a mod restaurant in Columbus, for enrichment experiences. Some
of the field trips (to the Center of Science and Industry, Ohio wild flowers and trees display and the bird refuge at Blendon Woods Pond, environmental and planetarium laboratories, etc.) created a science flavor in the elementary portion of the School Without Schools. This suggested that expanded use of field trips would be one way to build the science curriculum in a district that has been apparently resistant to science at the elementary level. Only one elementary teacher gave a reason for not meeting outside school with her students. She said they were not motivated to learn and would not attend.

Elementary teachers were divided about the success of School Without Schools. Some said it caused students to drop hopelessly behind. Others said students would get as much attention as they did during the regular program, and maybe more. Most seemed to indicate that School Without Schools was making the best of a bad situation. Some elementary teachers saw many successful aspects of School Without Schools. Frequently mentioned aspects were parental help and cooperation, community support, small group and individualized instruction, opportunities to tutor slow learners, and stimulation provided the students for their own self-directed learning. At best, School Without Schools was judged by teachers to be a remedial program for slow learners. Generally it was seen to be a holding pattern at the elementary level. After several observations, it was concluded by the team of experts that elementary teaching was not innovative during or following School Without Schools. Teachers were observed to use conventional methods of teaching and stressed "the basics.

SECONDARY SCIENCE EDUCATION DURING SCHOOL WITHOUT SCHOOLS

The general observations made on pages five through eight of this report about the condition of education during School Without Schools applied equally to elementary and secondary science education. These general points will not be repeated. There are some additional points, however, that appeared to be unique to secondary education; and further, there were observations that could be separated among the categories of secondary math education, science education, and social studies education.

It was evident during the three-week School Without Schools Program plus one week vacation that more written work/homework was being assigned to students than was assigned in the regular program. This heavy emphasis on homework showed up at the secondary level across all subject areas. A second general observation at the secondary level was that great confusion existed over grading during School Without Schools. Even after the normal program resumed, both teachers and students were unsure whether grades would be assigned for the period as: (1) pass/fail, (2) extra credit, or (3) grading as usual. A third, fairly pervasive, aspect of secondary education was the relief felt by teachers to get back into regular sessions after School Without Schools ended. Teachers reported that there was considerable pressure to cover material that would normally have been taught during this period. Most felt that they were one to two weeks behind after regular school resumed. Teachers also were relieved that structure and rules returned to normal after School Without Schools.

In secondary mathematics, the typical method of teaching during School Without Schools involved review of homework, brief explanations, and question-answering. Help sessions were provided by most teachers either during the one day a week at school or outside the classroom. The teaching methods were observed to be not very different from the regular program. Exceptions to this general observation included observing one teacher using special activities and projects as a method of teaching, another teacher using frequent testing which was not evident during regular sessions, and a third teacher using learning packages that she had developed. The learning packages were seen as one of the most innovative approaches used by those secondary math teachers who were observed. There were
also numerous incidences of teaching enrichment material in secondary math during School Without Schools. Two examples were the teacher taking the opportunity to teach probability and statistics and another teacher teaching number theory. Both topics were ones that would not have been covered under normal conditions.

Few math teachers used the media or field trips during School Without Schools. Only one of the teachers observed at the secondary level in mathematics was attempting to use the television lessons as a component of instruction. A few others had suggested to students that they watch the television programs, but these teachers were not integrating it with their classwork. Teachers frequently commented that content of the television programs was not made known to them until after they had already planned their lessons, and they apparently felt no responsibility for using the television lessons. Others noted that the content of the television lessons did not parallel their own instruction, and hence, did not attempt to incorporate television into their classes. Radio and newspapers were used even less often than television by math teachers.

Several teachers felt that students had suffered more in mathematics than in other classes. The comment was made, "School Without Schools was more difficult for science and math than for social studies because one unit builds on another, especially in math." One teacher was giving quizzes to add marks for grading purposes rather than marking on the basis of one test. Another secondary math teacher noted that her evaluation of the students' work done during School Without Schools showed that performance was poorer than usual. This teacher and her student teacher had made a special effort to integrate TV lessons with work sheets and text material into learning packages for the students; and both teachers had been available to the students extra hours beyond the once-a-week class session. Their geometry students did not take the initiative to come in for extra help. They seemed to have watched the first TV lesson, but none after that. These teachers' Algebra II students also were a disappointment. They did not do as well on the tests and homework on rational numbers as was expected. The teachers attributed this to the fact that the students were not mature enough to do so much of the algebra on their own, even with their guidance through the learning packages and the in-class sessions. They felt that the three-week period was especially hard on students in the upper level math courses. These teachers were interesting to observe because of the special efforts they had put into School Without Schools. They demonstrated that it was possible to be creative and productive under crisis conditions. Not all of their efforts went unrewarded. Some of their contemporary math students who had four special projects to do in addition to the learning packages pleasantly surprised them. They said that some of the students who had usually not responded well to the regular work had made good attempts on the projects. They also commented that the nature of the projects (a home floor plan, a personal cash-flow record, a family budget for a month, and income taxes) had made them much more aware of the students' home life and of the problems students bring to school than did any previous work they had done.

In secondary science the typical method of instruction was one of "hand in the assigned homework and we'll discuss it." Demonstrations and laboratory exercises were greatly reduced during School Without Schools. Reasons given varied, but the two following were voiced frequently: (1) "Not enough time in one class period when you have to give assignments and collect papers"; (2) "I don't want anyone coming from another school to start using MY laboratory and MY chemicals (or equipment), and I wouldn't go into another school and use another teacher's laboratory and use his chemicals (or equipment)." Communication and cooperation about equipment use needed to be encouraged and facilitated. One teacher felt that the administration should have mandated that each teacher mount a complete educational program. This might have included instruction, laboratory, help sessions, and evaluation plans. There was a recognized need for self-contained instructional units or packages. Such packages might include objectives, references, materials, worksheets, evaluation materials or activities. Observation of secondary science education indicated that many students were really not used to reading in order to learn. They had become dependent upon oral and visual learning.
Science instruction in the secondary schools during School Without Schools could generally be characterized as follows:

a. **Worksheets**

   The students were given handouts either prepared by or selected by the teacher; these handouts included questions and problems related to the topics under study. The students were to complete these worksheets and problems from week to week.

b. **Lecture and Discussions**

   The time in class was spent in discussing questions and difficulties encountered by the students. These difficulties were identified by the students in some cases, and by the teacher in other cases. The response to student questions or teacher-identified needs was mostly in a lecture mode once the difficulty was clarified.

c. **Extra Sessions**

   The teachers generally had some additional contacts arranged with the students. They were basically of three types: field trips, help sessions or telephone contact. Attendance was low at these additional meetings. Teachers seemed to feel that the students who were most in need did not attend.

d. **Laboratory**

   There was little laboratory activity.

   There were a few interesting projects in secondary science that were created by individual teachers. One student teacher asked the students in his biology class to keep records of food intake, energy output, and weight change for part of a unit on nutrition. At the end of School Without Schools, students reported their data and discussion followed. Another biology teacher offered his students a two-week trip to Florida under his supervision; and having received about ten volunteers, packed several vans and took the group to Florida along with a couple of parent chaperones. He said the group learned a lot during those two weeks observing different botanical and zoological specimens as they appeared in nature. The appropriateness of this activity might be questioned, since the students who went to Florida were not present in Columbus to pursue their total program of study. Again, it would seem apparent that the elementary organization, that has one teacher per group of children, was more conducive to the full out-of-school activities than was the secondary program, which has several teachers crossed with several groups of students.

In secondary social studies, like secondary science, the typical method used during School Without Schools was "hand in the assigned homework and we'll discuss it." Observed classroom periods involved about 65% of class time in independent work by students and 25% in students asking questions and teachers providing answers. The remaining 10% was spread over many different activities.

Some social studies teachers took advantage of School Without Schools to provide their students with experience and discussions that ordinarily would not have occurred. One secondary sociology teacher took the opportunity to develop a survey of student attitudes toward School Without Schools as a class project. The questionnaire developed by the class was administered to a sample of secondary students. The data were analyzed and written up in a research report. Another teacher called each student every week for a one-half hour conversation about their social studies lesson (morals and facts). A third used in-school...
time for reading and note-taking activities and discussion of Russian political concepts. The reading done by the class was George Orwell's Animal Farm, assigned for the purpose of reviewing and criticizing concepts associated with communism. The teacher went around the room speaking to individuals when signaled by raised hands. Student attention in this class seemed to be very much directed on doing the assignments.

In retrospect, School Without Schools presented secondary science teachers and their students with an opportunity to diverge, to open up, to get out of the routine. Some took the opportunity and were gratified. Most did not at the secondary level; and, as at the elementary level, once classes resumed, little noticeable residue in science education from School Without Schools remained.

IN SUMMARY, WE SAW

- a high degree of professionalism and dedication on the part of the teachers, but also some poor teaching.

- a great deal of traditional teaching and only a modicum of creative instruction.

- the idea of massive instruction over the public media tested, but it did not work.

- that School Without Schools was the most effective component of the School Without Schools Program.

- that math, science, and social studies, in that order, are important parts of Columbus programs; but also that these topics are often not taught very well—especially at the elementary levels.

- that contingency planning both before and during a crisis is an art that educators should master.

- vividly that education is and must be the concern of all segments of society, especially during an emergency.

- that Columbus has good community strength, and that they can muster it in the face of a common enemy.

- a tough-minded and competent performance on the part of the public and private schools, but a weak performance by the gas company.

- that none of us are the masters of our own destinies, and that working together is often essential.

- finally, that School Without Schools could be described as total community involvement in making the best of a bad situation.
James R. Sanders is Associate Professor at Western Michigan University and Associate Director of the Evaluation Center there. Before assuming these roles in 1975, he served as Assistant Professor at Indiana University (1970-73), and Senior Research Associate with Northwest Regional Educational Laboratory (1973-74), where he subsequently became Program Director and member of the Council of Directors and of the Executive Board (1974-75). He is currently a member of the Board of Directors of the Evaluation Network. He lives in Plainwell, Michigan with his wife and family.

Jim's teaching interests (evaluation methods, research methods, statistics and measurement) and research interests (field experiments, testing, assessment, and research and evaluation methodology) are reflected both in the projects in which he has participated and in his publications. The former include work with the USOE Clearinghouse for Applied Performance Testing; statewide assessment projects for Alaska, Hawaii, Oregon and Washington; the Graduate Program Development Project for the Faculty of Education at the University of British Columbia; and the External Masters Degree Project at the Western Michigan University Evaluation Center. His publications include articles in the Review of Educational Research, Educational Researcher, Journal of Educational Psychology, Educational Technology, and the Journal of Research.
Daniel Stufflebeam has been the Director of the Evaluation Center and Professor of Education at Western Michigan University since 1973. Previously, he served for two and a half years as a public school teacher in Iowa and Chicago and for ten years at the Ohio State University, where he advanced from instructor to professor and where he directed the test Development Center and later the Evaluation Center. Recipient of a Ph.D. in measurement and research methodology from Purdue University (1964), he has also participated in a post doctoral program in statistics and experimental design at the University of Wisconsin (1965).

He has chaired several important committees including the NCME Board’s Finance Committee, AERA’s Research Training Committee, the PDK National Study Committee on Evaluation, and the PDK 11th National Symposium on Educational Research. He is currently the chairman of the Joint Committee on Guidelines and Standards for Educational Evaluation and is a member of the AERA/APA/NCME Committee on the Review of the Standards for Educational and Psychological Tests. He has also served on the editorial boards of the Journal of Higher Education, Educational Technology, Evaluation Comment, and Evaluation and Program Planning: An International Journal.
He has served as lecturer at the University of New Hampshire and the University of Jyvaskyla, Finland, and has been an advisor to numerous governmental and educational agencies.

At Ohio State University he performed research on the item sampling technique and educational change, directed the development of more than 100 standardized tests (including eight forms of the GED tests), developed the CIPP Evaluation Model, and assisted several local, state, and national agencies to install evaluation systems. Since moving to Western Michigan University, he has conducted several major evaluation studies, has codirected an AERA traveling training institute in evaluation, and currently is directing or codirecting projects to develop standards for educational evaluation, to study the Columbus, Ohio, public school system's response to the energy crisis of 1977, and to assist Western Michigan University to install a university-wide program review system.

APPENDIX H

SCHOOL WITHOUT SCHOOLS
HANDBOOK MATERIALS PERTAINING TO
SCHOOL STAFF ASSIGNMENTS
The present crisis threatening the closing of schools is a major disaster affecting the social structure of the City of Columbus, the State of Ohio and the United States of America.

The implications and anticipated problems resulting from the shutdown of the public school system are monumental and far reaching.

The educational loss to students will not only be a factor for the days schools are closed but will be carried over to the years ahead. A dedication to make the best of a very negative situation is a goal that all educators must strive to attain to assure the best possible educational program for the students of the Columbus Public Schools.

The information and details formulated to give guidance to the building administrator confronted by the closing of schools due to the energy crisis is to be a guideline for orderly and safe transition to the shut-down situation and a return to normal building functions. This will not be an all inclusive directive but will identify common problems and concerns for the positive return of the school building and the personnel to the educational process.
Principal's Responsibility

Communications - Headquarters & Other Education Centers
Public Communication

Plans - Students

Things to Think About
"School without Schools" - Attendance & Grades
Closing - "School without Schools"
Elementary Lunch Program
Secondary Lunch Program
Transportation - "School without Schools"
School Day Schedules
Newspaper, Radio, T.V. & Media Program Instruction
Vocational Education

Emergency Storage Procedures

Mothballing - Audio Visual

Equipment - Procedures to Follow

DSPD Teaching Staff Concerns

Mothballing - Buildings

Lunchroom - Closing

Care of Food

Trade & Industrial & Agriculture Chairpersons

Library

Mothballing - School Buildings

School Health Rooms - Closing

Mothballing - Science

Damageable Materials

Textbooks - Elementary & Secondary

Vocal Music Equipment

Guidelines for Interscholastic Basketball Game & Practice

Girls' & Boys' Basketball Practice Schedule

Revised City League Boys' Basketball Schedule

Revised City League Girls' Basketball Schedule

Junior High Girls' Basketball Season Postponed

New Dates & Site - Reserve & Varsity Wrestling Tournament
PRINCIPAL'S RESPONSIBILITY

1. Plant inspection - daily security check.
2. Staff communication - bulletins, plans, etc.
3. Staff telephone numbers.
4. List of community leaders who may help with programs - telephone numbers.
5. Plan of action for your building and staff - organize a telephone call system for your staff.
6. Daily report from the principal, attendance programs, participation results.
7. Report of security problems:
8. Maintain a daily log of activities.
9. Absentee - Reports - (Classified-Professional)
10. Assistant Superintendent - location - telephone - written reports.
11. Payroll - handling
12. Inter-school mail.
13. Reorganization plans.
14. Posting of location for your headquarters - for parents, security and contacts (hours).
15. Securing the building (as in June - prepare for removal and storing of live things).
16. Plan for weekly staff meetings.
17. Plan to obtain permission slips for non school building activities.
COMMUNICATIONS WITH HEADQUARTERS & OTHER EDUCATION CENTERS

1. Communication with all schools imperative.

2. 32 - Educational Centers - Directory information will be needed for emergency situations.
   a) Emergency phone in each Education Center.
   b) Communications Center - Board of Education.
   c) Mail service.

COMMUNICATION WITH THE PUBLIC

1. Superintendent's Office

2. Media - TV - Newspapers

3. Individual school plans - via media, U.S. mail, telephone

4. Vendors - notification as necessary

5. Athletic contracts:
   a) Organized schedule at schools other than gas. To be organized and supervised by Don McCualsky and Jane Walters.
   b) Basketball - Ladies & Men
      Wrestling -
      Gymnastics -
PLANS - STUDENTS

1. Attendance or records of work completed.
2. Credit for work completed, contract assignments.
3. Large group instruction? Combination classes.
4. Guided learning technique, teacher schedules by subjects or classes.
5. Lesson plans - unit plans - counselors.
6. Graduation - Senior credits, completion of requirements.
THINGS TO THINK ABOUT

1. Keys to padlocks, lights for buildings, check security systems (Fire alarms, etc.).
2. Telephone
3. Supplies and shipments to the building during school hours.
4. Mail
5. Maintain supply of material to replace broken windows - emergency situations.
7. Registration of new students, withdrawal of students.
8. Handling of student records.
9. Organize your telephone call system for contacting your staff with minimal time limits.
10. Staff meetings - weekly.
11. Permission slips for student participation.
"SCHOOL WITHOUT SCHOOLS"

Attendance and Grades

1. Pupil attendance is required and teachers must record attendance for assigned school days. Assigned school days include those days when the school is in session, whether one day a week or as many as five days a week in a Columbus Public School facility or another approved facility.

2. Credit shall be awarded to students for participation in the "School Without Schools" program. Teachers should be advised to use the same techniques that they use in their regular school program to assess grades and to award credit for the completion of school assignments and approved projects.

3. Teachers are not required to maintain or submit to the principal a log of activities.

4. Principals should establish the following expectations for teachers:
   A. Teachers should keep, for their own records, a list of the pupils involved in each outside activity. (At a later date it could be very useful for teachers to know who did and who did not take part in a particular activity. A list of pupils on a trip is always essential).
   B. Teachers must notify the principal in advance of all outside activities which involves a group of pupils. (This will enable the principal and the school office to respond to parent contacts in case of emergency). By the end of each week, teachers should let the principal or school office know, orally or in writing, how many pupils took part in each activity.

PRINCIPALS ARE TO DUPLICATE AND DISTRIBUTE THIS PAGE TO ALL TEACHERS
C. Principals should maintain a record of these outside pupil activities and report the number of activities and attendance on the weekly report form to the Pupil Personnel Department. This is a summary report and teachers should not be individually named on the report.

PRINCIPALS ARE TO DUPLICATE AND DISTRIBUTE THIS PAGE TO ALL TEACHERS
Closing of the "School Without Schools" program due to weather conditions.

In the event severe weather conditions would prevent carrying out programs planned for any day during the period of time schools are closed for the energy emergency, announcements will be made on television and radio by 7:00 a.m. All pupil activities at all sites would be suspended if such a situation occurs. Radio and television programs planned as part of the "School Without Schools" program will be presented.

Administrators should report to the building they are assigned to for the emergency period after checking their own building for maintenance problems. Teachers and clerical personnel would not be required to report.
The following procedures will be used for operation of the school lunch program during the duration of the "School without Schools" Program.

Lunches will be served at all schools and will be available to all pupils on the day designated as that schools day for attendance by all pupils during the "School without Schools Program". All parents are to be notified of this provision.

Those elementary schools which will be in attendance at secondary schools should consult the bulletin on secondary lunch programs for additional information.

I. Money Collection and Reporting Procedure

A. The teacher will record the free, reduced price and paid lunches on the classroom teachers list. The present (January) classroom teacher's list can be utilized for this period by putting three additional columns at the right hand side and recording the proper dates and days at the top of the column.

Note: The price of lunches will remain the same (Full price 50¢; reduced price 20¢).

B. The teacher will record the information on the classroom receipt envelopes (money to be collected for only one day). Please write the name of the "Home" school at the top of the envelope.

C. The Food Service Helper will collect the envelopes from the classrooms. Please inform the Food Service Helper which classrooms are being used by your school.

II. Lunchroom Procedure

The teacher should escort those children who are participating in the lunch program to the lunchroom and stay with them until they are seated.

A. Secondary school personnel will be available to help the children through the cafeteria line.

B. In elementary schools the children will pick up there lunches in the customary manner.
III. Assignment of Personnel

A. On those days that your school is in session the Food Service Helper will perform those duties normally associated with a Monday Operation (i.e., collecting and counting money, preparing bank deposit, preparing "weekly" report). If your regular Food Service Helper is not available, an experienced alternate Food Service Helper will be assigned to you.

B. The Food Service Helper will not be responsible for heating the meals unless you are in your "home" school. She (he) will be responsible to assist in serving the meal to children.

In addition, extra personnel will be available and assigned.

IV. Banking Procedures

The Food Service Helper will turn over the lunchroom receipts to the Food Service Manager or Food Service Helper at the receiving school. These receipts will be collected by Metropolitan Armored Car Company.

V. Receiving School Procedures

These procedures apply to those elementary schools that will be "receiving" schools.

A. The Food Service Helper assigned to your school will be responsible for heating all meals served in your school.

B. On days that your "school" is used by other "schools" the Food Service Helper will work that schedule necessary for heating the meals.

C. On the day that your "school" is in session your Food Service Helper will work the normal Monday schedule (i.e., will collect money, prepare bank deposits and weekly reports).

Note: If your Food Service Helper is not available an experienced alternate will be assigned.

VI. Ordering and Delivery Procedures - Receiving Schools

A. A predetermined number of lunches in excess of your normal requirement will be delivered to these schools each morning.

B. After lunch has been served the Food Service Helper will call in the number of lunches used and the number remaining. The remaining lunches will be served the following day and the Food Service Helper will be instructed on proper rotation procedures.
VII. Non Lunch Program Schools

Lunch will be made available to all students regardless of whether or not their "home" schools participate in the Lunch Program. A free lunch will be available to those students presently receiving free milk. The remainder may participate on a "paid" basis only. All records will be maintained by the Food Services Department.

VIII. Alternate Sites

In those schools having classes in non-school sites, a cold (picnic type) lunch will be made available. The number of lunches needed at these sites must be called in to the Food Services Production Center (225-2725) by 9:30 a.m. each morning.

IX. Breakfast Programs

No breakfast programs will operate during this period.

X. Problems

Questions regarding the above procedure should be directed to Mike Morri1, Food Services Production Center (225-2725).
SECONDARY LUNCH PROGRAM

1. Plan to serve complete meals, milk and a la carte items to secondary students. We will serve the complete lunch only to elementary students.

**PRICES**

<table>
<thead>
<tr>
<th>Students</th>
<th>Secondary</th>
<th>Elementary</th>
<th>Milk</th>
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<tbody>
<tr>
<td>Paid</td>
<td>60¢</td>
<td>50¢</td>
<td>Students - 5¢</td>
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<tr>
<td>Red Price</td>
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<td>20¢</td>
<td>Adults - 10¢</td>
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<tr>
<td>Free</td>
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ADULTS

70¢       60¢

(Beverage not included)

2. Managers of closed schools will move to the alternative school location, and will issue free, reduced price and paid tickets to the students at the start of the school day in the cafeteria or area designated by the principal. Tickets will also be available during the noon serving periods.

3. We will be unable to use secondary student employees during the emergency period.

4. Adult Food Service staff members of closed schools will be transferred to schools in operation during the emergency period to assist in the preparation and serving of meals.

5. Elementary and secondary students will be expected to go through the cafeteria lines during the noon lunch periods. Secondary students will present their tickets and/or money at the cash register. Elementary students see number 6 below.

6. Plan to continue the use of the "Classroom Teachers" list that is prepared and recorded by the elementary classroom teacher. Refer to the elementary section below.

**ELEMENTARY PRINCIPALS:**

Be certain to bring a supply of the necessary forms used in the elementary lunch program, (Classroom Teachers List, Classroom Teachers Envelopes, Cloth Money Bags, etc. to be used at the alternative school location).
7. The Breakfast Program will not be in operation during the emergency period.

8. Arrangements will be made to have a Bank Messenger Service call twice each week. Lunch room receipts are to be held in the school safe.

9. Food Service Office to be located at the Food Service Production Center during the emergency period.

   Phones: 258-2050   225-2725

10. Elementary principals please refer to the Food Services section in the "Handbook for School without Schools." Note especially the banking of any remaining food service funds by the school principal or person designated by the principal on the last day of school. Bank at any Ohio National Bank -- send duplicate deposit slip to: Burnett Collins, F.S. Quality Assurance Office. LEAVE THE SAFE LID OFF during the emergency closing period.

js
TRANSPORTATION - SCHOOL WITHOUT SCHOOLS

All principals are reminded to have supervision for loading and unloading students to be transported from one facility to another for educational purposes. A teacher should be assigned to ride the bus with the students. The teachers should be recruited on a voluntary basis if possible. If volunteers are not available this duty should be assigned on a rotating basis, to assure maximum supervision of students during the transportation process.
ELEMENTARY SCHOOL DAY SCHEDULE
( Including Kindergarten)

The elementary schedule for all schools will be as follows:

Morning Session 9:15 a.m. 11:30 a.m.
Afternoon Session 12:15 p.m. 2:30 p.m.

The above schedule will also apply to schools where children are walking from one site to another.

Appropriate safety plans should be instituted for children walking from one school to another that might include school safety patrols and safe routes to and from the alternative school site. It might be advisable in some situations where children will walk to an alternative site to have them meet at their home school and walk as a group to the alternative site with adult supervision. Parents should be notified in writing concerning the bus schedule or the plans for walking to the alternative school site.

KINDERGARTEN ONLY

The principal or a designated staff member should follow the morning bus back to the home school at noon to insure the kindergarten children are met by parents or other provisions are made to see them safely home.

SECONDARY SCHOOL DAY SCHEDULE

8:15 a.m. - 3:30 p.m.

CAREER CENTERS

Career Centers will follow the above schedule on Fridays.
The media programs are designed to encourage an on-going educational program for students. These programs should be used to supplement the instructional program planned for the "School without Schools". Teachers should announce to their students the daily time schedule for programs that are appropriate for their particular grade level. Emphasis should be given to the viewing and listening media programs and to the completion of the Columbus Dispatch daily "Classroom Extra" which applies to the educational level of the students involved (see section - for program summaries).

Teachers are encouraged to plan a follow-up to each of the programs in which their students participate. Students may bring in papers or notebooks compiled from the media experiences, to be reviewed and discussed in the "School without Schools" sessions.

Principals are requested to encourage teachers to take part in field trips and supplemental experiences for students. The activities available through the "School without Schools" programs are a once in a career opportunity to do some of the things you have always wanted to do but never had the time or the transportation to do.

PRINCIPALS ARE REQUESTED TO DUPLICATE THIS PAGE FOR A HANDOUT TO TEACHERS.
Southeast Career Center and Fort Hayes Career Center will receive students by Columbus Public School bus transportation on Friday of each week. Students will follow their regular school transportation schedules and observe normal pickup points.

Students may attend classes Monday through Thursday on their regular Career Center schedule by providing their own transportation.

**Auto Mechanics**

Additional instructional experiences for Auto Mechanics students at Marion Franklin, Walnut Ridge, Central and Small Engine at South High School are being arranged in the two Auto Mechanics labs, heated with alternative fuels. A meeting of these instructors is scheduled for Thursday at 3:45 at Briggs High School.

**Service Station**

The Service Station at 1080 East Broad will be opened every day. Students may attend by providing their own transportation.

**Auto Body**

The Mohawk High School Auto Body program will be opened every day. Students may attend by providing their own transportation.

**Fire Service and Law Enforcement**

Fire Service and Law Enforcement vocation programs will be offered daily at Mohawk High School. Students may attend by providing their own transportation.

**Horticulture**

The West High School Horticulture program will be opened every day. Students may attend by providing their own transportation.

**Electromechanical**

The West High School Electromechanical program will be offered every day. Students may attend by providing their own transportation.
EMERGENCY STORAGE PROCEDURES DURING SCHOOL CLOSING

During the February emergency closing of schools certain equipment, materials and supplies may require special treatment or steps to safeguard them from damage by lowered temperatures.

Department administrators have prepared the following series of contingency instructions and procedures for the protection of school property. If teachers want to accept responsibility for any school property they require for their instructional program, please have them sign out those items to be responsible for them.

The following pages of instructions are not applicable and definitive for every school, therefore, please exercise any additional cautions you deem appropriate for other unlisted school property.
EMERGENCY STORAGE PROCEDURES

In the event that schools are closed and buildings are "mothballed" for the duration, steps will have to be taken to avoid art materials and equipment being destroyed by freezing temperatures. Below is a list of procedures for assuring the safety of your various art supplies and apparatus.

We ask you to take all endangered items home and give them safe, warm storage. Perhaps some of your fellow teachers could help you with this task.

Please fill out the Inventory Storage Sheet. Leave a copy with your principal and maintain one for yourself.

To make sure that the plumbing in your area is properly drained, find out who has the draining assignment in your building and provide a list of waterlines, pipes, taps, and drains located in all rooms of your department.

ART SUPPLIES

1. **Enlargers**: Remove lenses, box carefully and take to warm place; cover enlarger with blanket or some heavy porous fabric.

2. **Cameras**: Box carefully and take to warm secure place.

3. **Projectors**: May leave in building but suggest storing in warm secure place (do not use until projector has returned to room temperature).

4. **Film (undeveloped)**: If unsealed or not in tin or plastic, store in dry place.

5. **Film (slides, 16 mm)**: Store in dry warm place.

6. **Photo Papers**: If unsealed, store in warm dry place (avoid condensation during transport by packing in styrofoam cooler or other insulated container). If sealed, may remain in school building.

7. **Chemicals**: Store mixed chemicals in above-freezing place; unopened dry packaged chemicals may remain in school buildings.

8. **Ceramic and enameling kilns**: May remain in school buildings.

9. **Moist clay**: If frozen, must be re-processed.

10. **Flammables**: If in metal containers, may remain in school buildings; if in glass containers, place in sink or metal leak-proof trash can in case glass breaks.
Art Supplies Continued

11. All moist or liquid materials without alcohol content: remove to warm place, i.e., liquid tempera varnish enamels inks (tube and bottle) acrylics oils glazes (mixed only) glue paste Gesso polymer medium wax-resist liquis
INVENTORY SHEET:

EQUIPMENT & SUPPLIES REMOVED FROM BUILDING FOR EMERGENCY STORAGE

SCHOOL

TEACHER/S

DATE

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<tr>
<th>EQUIPMENT</th>
<th>Quantity</th>
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<th>Model</th>
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INVENTORY SHEET:  

TEACHER COPY

EQUIPMENT & SUPPLIES REMOVED FROM BUILDING FOR EMERGENCY STORAGE

SCHOOL

TEACHER/S

DATE

EQUIPMENT

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The following items need to be protected from freezing temperatures:

1. Videotape recorders, cameras, and tapes.
2. Equipment that uses vacuum tubes - 16mm projectors, radios, television sets, reel to reel tape recorders.
3. Audio tapes, cassettes, filmstrips, film loops, records, microfilm.

Batteries should be removed from all equipment.

Transistorized equipment should weather satisfactorily if protected by wrapping or boxing.

Central Sound Systems should be covered with protective material.

PLASTIC MATERIALS SHOULD NOT BE USED as a protective wrap as they will hold moisture. Use newspapers, canvas, etc.

Equipment such as overhead projectors, filmstrip projectors, opaque projectors, microfiche readers, should be protected but NOT moved.

Insofar as possible, equipment should NOT be stored against exterior walls.
CONTINGENCY PROCEDURES AND GENERAL INSTRUCTIONS FOR DEPARTMENT CHAIRPERSONS OF BUSINESS OFFICE EDUCATION AND DISTRIBUTIVE EDUCATION TO FOLLOW IN THE EVENT OF CLOSING OF SCHOOLS.

GENERAL All machines are to be unplugged. All machines are to be covered to keep dust out.

Small machines in BOE storage room and lock.

Discard or take home all fluids, glue, etc. items that would freeze.

SPECIFIC PROCEDURES TO FOLLOW FOR EACH TYPE OF EQUIPMENT.

A.B. DICK - Contact person Earl Meyers - phone 488-5961.

Spirit Duplicating Machines.

1. New A.B. Dick models - take hose out of gallon can, pump air through the lines, consequently clearing all alcohol liquid to the reservoir. Once alcohol is in the reservoir it will evaporate before freezing. Keep machine covered and unplugged.

OLD Container with alcohol must be removed. Recommend pouring of alcohol from container, either discarding into sink or pouring back into can for storage.

STANDARD Check fluid level gauge. If not over halfway full, leave as is.

SPRINT COPY If the gauge reads "full" try to get fluid out of machine somehow. (When machine is full there is possibility of freezing, consequently major damage to the machine. If machine is half full of liquid, freezing is almost out of the question. Keep machine covered and unplugged.

A.B. DICK Unplug and make sure ink pad is in correct diagonal "STOP" position and keep machine covered.

MIXCO A. B. Dick #675 Copier. Petroleum base solution is used. Do not think that it will freeze. Consequently keep machine unplugged and covered.

3M PHOTO COPIER Model #209. Instructions are to take paper out. (White rolls and pink intermediate rolls).

Unplug, cover machine with plastic garbage bag or plastic cover provided when machine was delivered. The important thing is to keep machine covered and free from dust.

REMINGTON Model II & III - contact person Joe Toronto - phone 272-8998.

PHOTO Take paper out of machine - take fluid out of machine. Dump fluid out of tank. Unplug and cover machine.

*Possible problem - flattening of feed rollers unavoidable. May require service call when operating again.

A.B. DICK Make sure that the machine is cleaned, especially the ink rollers.

TABLE-TOF Drain all solutions.

OFFSET Leave in night/latch position.

IBM KEY PUNCH Seven locations. Unplug machine and cover completely.
**EM THERMO**

Make sure to cover when machine is cool to avoid dust getting into machine. Unplug.

**INNER-OFFICE TELEPHONE SYSTEM**

No instructions.

however, there is the possibility of moisture and condensation developing and having corrosion occur on the switching equipment. This will require a service call when operational again.

**TRANSCRIBERS & WORD PROCESSING EQUIPMENT**

(S.E.C.C. and Ft. Hayes C.C.) Unplug equipment. Keep all equipment covered. Make sure that room temperature has been reached for at least eight (8) hours prior to turning on equipment. Once this is accomplished, turn on each piece of equipment for two (2) hours prior to operation.

**CALCULATORS & MECHANICAL ADDING MACHINES**

Cover machines and unplug. Allow machine to reach regular room temperature before starting to turn on again. This means the heat in Lab must be on for a minimum of 24 hours prior to operation of this piece of equipment.

**ELECTRIC TYPEWRITERS**

All electric typewriters present unavoidable problem—condensation will occur with up and down temperatures, causing rusting of type bars, shaft and other metals. Machines should be kept unplugged and covered.

**IBM SELECTRIC & OTHER ELEMENT MACHINES**

Unplug, completely cover, store if possible. Allow machines to reach room temperature before using.

**CASH AND REGISTER***

Cash registers at Briggs and Independence - Model DTS 100.

Contact DATA CASH - phone 224-4800

IN D.E. LABS

To prepare machine for cold storage, remove cash drawer out of machine and in the back of the machine is a cover plate (either black or silver). Remove this plate and disconnect the black wire. This disassembles the battery package. Unplug the machine and keep covered.

**SUPPLIES**

(Fluids, cleaners, glue, etc.) GET SMART, THINK!!

Check all cabinets and storage areas to determine what is freezable and what is not. Pack up items that will freeze and take home.

**SINK LOCATION**—Some of the ECE Labs have a sink located in the storage room. Make sure to identify in writing to your building administrator, the location of this sink and that it needs to be drained if schools are "moth balled."
DSPD TEACHING STAFF CONCERNS

The following information and concerns are those which we feel may be unique to our department in the event that schools are closed due to energy shortage:

1. Pre-kindergarten teachers should take necessary steps to remove snack items from the building which may be damaged by cold.

   They are further reminded to purchase snack items in small quantities so that surplus of these items are not on hand during the crisis period.

2. All Title I and DP teachers are to take necessary precautions to store equipment such as overhead projectors, language masters, calculators, and cassette tape recorders in a secure location, and should not leave them on display so that they are easily seen through windows.

3. Public school teachers assigned to non-public schools are required to work the total number of days equivalent to the approved public school calendar. In the event the non-public schools are operated when public schools are closed, teachers may continue to serve the children.

   It is requested that, in the event public school teachers work in non-public schools which may be open during the energy crisis period, sufficient information be maintained so that verification of time can be provided if requested.

   No teacher is required to work more days than would be required if assigned to a public school. However, all teachers are required to work a sufficient number of days to meet their contractual obligation.
If it becomes necessary to "mothball" buildings, or close them without heat for a number of days, please take the following action:

1. Notify all regular teachers who are assigned cars to store those cars at their homes in as safe a location as possible. Engine should be started and run for several minutes the day before school resumes, to be sure car will start the first day of school.

2. Notify all substitute teachers who are assigned cars to return their cars to 17th Avenue the afternoon of the last day school is in session. If these substitute teachers are assigned to Driver Education positions when school resumes, they should contact me at 224-6488 (office) or 885-3234 (home) for car assignments.

3. Notify Driver Education Team Teachers at your building to secure trailers as follows:
   a. Remove projectors and films and store them in a teacher's home. Call me to let me know which teacher is storing these materials. Our insurance company tells us these materials are insured while out of the trailers.
   b. Remove all personal items from trailer. Remove any liquid which might freeze.
   c. Disconnect battery from emergency light.
   d. Turn off all circuit breakers in trailer, turn off and padlock switch on outside of school building. Cables can be left in place.
   e. Store steps inside trailer to make it more difficult for anyone to enter trailer.
   f. Double lock doors with original locks and padlocks.

4. If multi-media equipment is in use in your school, store projectors and films at a teacher's home and let me know which teacher is storing them. The console should be stored in the school building in as secure a place as possible. Wiring taped to floors can be left in place, but responders should be disconnected and stored with the console.
CLOSING OF LUNCHROOM FOR THE ENERGY CRISIS

Each Food Service Helper is asked to comply with the following instructions for closing of the Lunchroom for the Energy Crisis:

1. On the last day of serving lunches, please send your Daily Lunch Report and copy of the bank deposit slip to your Satellite Manager, Quality Assurance Office by school mail, or stamped, self-addressed envelope to be sent to each school.

2. Lunch Program Monies - all monies on hand must be deposited in the Ohio National Bank by the Principal or a person designated by him.

3. On the last day after you have served the lunches, do the following:
   
   a. Refrigerator - clean and unplug the refrigerator, leave the door propped open so odors may escape.
   
   b. Safety Alarm Recorders - (Only the schools receiving P.M. deliveries have these.) Please leave the switch on CLEAN so the refrigerator will not alarm when it is plugged in when we return. Place a new chart in the recorder. Please remember to send the chart and report to Burnett Collins, Quality Assurance Office, by school mail.

   c. Milk Coolers - clean and unplug the milk coolers, leave the doors open.

   d. Oven - clean.

   e. Tables - please make certain they are free of all soil.

4. Keys - please leave all keys with the Principal.

Please call your Satellite Manager when you are finished with the above to inform her that your Lunchroom is ready for closing.

Milk - After lunch is served sell any remaining milk to children or adults. If you have any milk left in the cooler after the lunch period give it to students who serve the school in a special way (i.e. Safety Patrol, etc.). DO NOT LEAVE any milk in the cooler. (Same applies to Orange Juice)
CARE OF FOOD - STORE ALL FOODS PROPERLY

1. All possible frozen meats, fowl, similar, as well as frozen vegetables and fruits should be used before the close of school.

2. Every effort should be made to use as much food as possible before the close of school.

3. Store any remaining dried eggs in tightly covered containers and refrigerate.

4. Store any remaining starch foods, rice, flour, cornmeal, macaroni products, rolled wheat, dried beans, and similar in tightly covered containers.

5. Refrigerate all foods that cannot be kept in dry storage.

6. All butter and margarine should be frozen. It is advisable to refrigerate only what will be used daily, and keep the remainder frozen.

7. All cheese is to be refrigerated, not frozen.

8. Milk and Bread - keep orders to a minimum - what is necessary only. On last day of operation, freeze any remaining milk and bread.


10. Consolidate all frozen and refrigerated products as much as possible and disconnect those refrigeration units not needed for storage.

11. PLACE LOOSE ICE CUBES IN EACH FREEZER LEFT IN OPERATION.

12. Ask custodian to check freezers and refrigerators that are left in operation.

13. All refrigeration and freezer space which is not in operation should be washed and rinsed to remove soil and then washed with baking soda water (1 tablespoon soda to 2 qts. water) and dried thoroughly. The doors are to be left open if they are not kept running. Fasten sign on door "Please do not close." FULL PLUGS - TO NOT REMOVE CIRCUIT BREAKER LOCKS OR LOCKING PLUGS ON CIRCUIT BREAKERS.

14. All counter units (salad pan and milk cooler units) shall be turned off. FULL THE PLUGS. DO NOT REMOVE CIRCUIT BREAKER LOCKS.
LOCKING EQUIPMENT

1. Do not lock any equipment, milk coolers, refrigerators, etc., unless food/supplies are stored in the units. Keep cash register drawers open or lock the cash registers in the storeroom or office. (Recommend moving cash registers to storeroom if possible, but leave drawers open).

2. Clean the ranges, ovens, deep fat fryers, steam cookers and dry thoroughly. Leave pilot lights on.

3. Steam cookers should be left with doors ajar.

4. Dishwashers should be left open for ventilation after a thorough cleaning. Lift or remove "food collection" pans to allow air to circulate. Turn gas pilot off. Leave valve open.

5. All booster heaters should be turned off.

6. Tell the custodian all gas pilot lights on ranges, ovens, steam cookers, etc. are to be left on. Exception: The dishwasher and serving counters heated by gas. Turn these off.

7. Have all refuse and waste cans scrubbed with hot detergent water. Sanitize, rinse and dry thoroughly. Do not put paper in these. Leave uncovered.

8. Telephones. Be certain to lock the telephone. Keep office door locked if possible. Phone will be on - must be locked.

9. Safes are to be left unlocked and open.

10. Lunch Tickets The unused portion of rolls of lunch tickets remaining at the end of the last day of school should be locked in the storeroom. Do not leave in the safe, and do not send to the Food Service office.

SECURITY

Please, be especially security conscious for the closing period. Custodians may do building checks, but you should expect that to be limited.
OPENING

1. **Orders for Opening** - Prepare and phone in all orders, including standing orders (milk, donuts, etc.). When we are notified of opening date, Mr. Oler will notify all companies to deliver as ordered. Record all orders on your DAILY ORDER SHEETS and, for emergency purposes, notify each member of your staff where records are filed.

2. **Menus** - A one-week opening menu will be used by all schools. A regular menu will reach you to use following the first week after opening.

3. **Commodity Orders** - The commodity order placed on January 27 will be delivered on the first Wednesday following school opening.

**Send in U.S. Mail on last day**

You will receive a stamped, self-addressed envelope for you to send the following by U.S. mail on or of the day:

- invoices received including last day
- monthly CH 7 report
- extra service report (Jan. 21 - day of closing)
- weekly labor report
- deposit slips to date (include last day)
- January inventories - (if not already sent)

**CASH REGISTER TAPES**

Send by SCHOOL MAIL, same as always. Do not send by U.S. mail.

**STUDENT PAYROLL REPORTING**

Report time worked to the school clerk on Friday, January 28. Carry over work time for week of Jan. 31 to the first designated payroll report after opening. (If you must report hours to clerk on Friday before students work, carry over both Friday and week of January 31 to the first designated payroll report after opening. DO NOT ATTEMPT TO GUESS THAT THE STUDENTS WILL WORK ON FRIDAY.)

**Transportation Reports**

When you return do not send in transportation cards but continue to use them.

**Change Fund and Final Deposit**

1. The manager will need to take to the bank the change fund and any receipts being held in the safe. Plan to take another staff member along to the bank.

2. Deposit the total amount of receipts on hand.

3. Get a cashier’s check or money order from the bank for the amount of the change fund. Check should be made payable to the manager.
Manager should keep the check or money order and cash it the day before school reopens.

CLOSING WORK SCHEDULE

Managers are expected to work the next regular work day following the last day of school to complete the above tasks. Call in other staff members as required. Ovens could be used to bring the temperature up to a level sufficient for a short work period. However, it would be best to remain over the last day of school, if possible, to complete the above tasks.
STEPS TO BE TAKEN FOR EMERGENCY CLOSING OF SCHOOLS

In the event that schools are closed due to the gas emergency the following procedures should be taken in the home economics rooms:

A. Schools Closed, Minimum Heat (Above Freezing)

1. Arrange with the head custodian to have the gas turned off to the ranges and dryers.

2. Remove all food from all refrigerators and freezers and discard. (Any item of value may be taken to your home freezer for storage should you desire.)

3. Unplug freezers and refrigerators, defrost and clean interiors. PROP DOOR OPEN SO THAT IT WILL REMAIN OPEN TO PREVENT UNDESIRABLE ODORS IN THE APPLIANCES. (This precaution is taken in the event of power failure.)

4. Unplug all sewing machines.

5. DRAIN the water out of all steam irons.

B. Schools Closed, NO HEAT:

1. Arrange with the head custodian to have the gas turned off to the ranges and dryers.

2. Remove all food from all refrigerators and freezers and discard. (Any item of value may be taken to your home freezer for storage should you desire.)

3. Unplug freezers and refrigerators, defrost and clean interiors. PROP DOOR OPEN SO THAT IT WILL REMAIN OPEN TO PREVENT UNDESIRABLE ODORS IN THE APPLIANCES. (This precaution is taken in the event of power failure.)

4. Unplug all sewing machines.

5. DRAIN the water out of all steam irons.

6. Arrange with the head custodian to disconnect washers and dishwashers and be sure all water is drained from the appliances.

7. Arrange with the head custodian to shut off water and drain all pipes to sinks and hand bowls.

8. Empty bottles of distilled water or take them home to store.

9. All canned foods, bleaches, furniture polish, ink, liquid soap, and other solutions that would freeze are to be boxed and labeled: STORE IN A HEATED AREA. This should be brought to the attention of the principal or head custodian.
CONTINGENCY PROCEDURES AND GENERAL INSTRUCTIONS FOR DEPARTMENT CHAIRPERSONS OR TEACHERS OF TRADE AND INDUSTRIAL AND AGRICULTURE TO FOLLOW IN THE EVENT OF CLOSING OF SCHOOLS

GENERAL

In the event that minimal heat is maintained in your building be sure to secure all flammable liquids under lock and key, lock up all tools, remove all saw blades, etc., that could be used in vandalism, grease all exposed machine surfaces, close off all draft sources, such as, air intake and exhaust systems.

In the event that a moth balling takes place with no heat we hope that you will do all in your power to help minimize any loss to supplies and equipment. Below is a partial list of precautions and suggestions that may help during this emergency.

1. Close all "draft areas" in your room, such as, outside air intakes, exhaust vents, etc.
2. Move benches away from windows and put rags at bottom of windows to absorb moisture.
3. Windows should be locked. If necessary make a locking devise.
4. Grease all exposed machined surfaces.
5. Drain water from all air compressors and traps. (This may have to be done last.)
6. Clean and oil all Graphic Arts machinery, platten presses and offset equipment.
7. Drain blueprint machines of ammonia.
8. Make arrangements for heated storage for any liquid chemicals that you do not know the freezing temperature of (example: detergents, diluted chemicals and other water soluble chemicals).
9. Take precautions to protect all materials that freezing will damage, such as, glue, water base paints, etc. (This may mean taking them home if possible.)
10. Flammable materials should be stored in retail containers and locked in metal cabinets.
11. Tools should be oiled and stored under lock and key where they are not usually stored because of possible break-in at schools.
12. Remove blades from all power saws and lock up to avoid theft.
13. Take all batteries out of electronic equipment.
14. Box all electronic equipment feasible, put absorbent material inside and seal. We will supply boxes and absorbent materials. It may be advisable to take some equipment home. When equipment goes back into service do the following:

A. Allow 24 to 48 hours to warm up and dry out.
B. High voltage units, such as, scopes and power supplies, should be visually checked inside for dryness. Arcing could take place if it is not dry.
C. Replace all batteries where needed.

15. Call for "pick up" on all Oxygen and Acetylene tanks.

NOTE: After returning to school and you find any damage to equipment due to vandalism, weather, broken water lines, etc., please inform this office immediately so we can get things back in operation as soon as possible.

16. Check the attached list and make arrangements to assure that all items which apply to you are provided for.
Prepare the following list of appliances by draining or pumping antifreeze through them:

<table>
<thead>
<tr>
<th>Drain</th>
<th>Antifreeze</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure Washers</td>
<td></td>
</tr>
<tr>
<td>Steam Cleaners</td>
<td></td>
</tr>
<tr>
<td>Floor Exhaust Systems</td>
<td></td>
</tr>
<tr>
<td>Floor Grid Systems</td>
<td></td>
</tr>
<tr>
<td>Air Compressors</td>
<td></td>
</tr>
<tr>
<td>Air Lines</td>
<td></td>
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<tr>
<td>Air Compressor Water Cooled Driers</td>
<td></td>
</tr>
<tr>
<td>Shop Toilets</td>
<td></td>
</tr>
<tr>
<td>Shop Urinals</td>
<td></td>
</tr>
<tr>
<td>Cooling Systems of cars which will be stored</td>
<td></td>
</tr>
<tr>
<td>Cooling Systems of Mock-up Engines which will be stored</td>
<td></td>
</tr>
<tr>
<td>Empty 55 gallon drums</td>
<td></td>
</tr>
<tr>
<td>Water Coolers</td>
<td></td>
</tr>
<tr>
<td>Unused lab areas with sinks and drains</td>
<td></td>
</tr>
<tr>
<td>Radiators</td>
<td></td>
</tr>
<tr>
<td>Sprayers</td>
<td></td>
</tr>
<tr>
<td>Water Cooled Machines</td>
<td></td>
</tr>
<tr>
<td>Machines with water cleaning systems</td>
<td></td>
</tr>
<tr>
<td>Insure water is out of lift pits.</td>
<td></td>
</tr>
</tbody>
</table>
LIBRARY

1. Remove all plants, aquariums, live animals and other specimens that low
   temperatures would kill.

2. Remove supplies that would be damaged by freezing such as: ink, mystic tape,
   replacement lamps, plastic spray cans, thermal masters, AV repair kits,
   laminating supplies, etc.

3. Follow instructions regarding AV equipment and software as developed by the
   Department of Radio, Television, and Audio Visual Education.

4. Disconnect any copying machines.
1. Check water lines and drains to break area, rest rooms, and for sprinkler system.

2. Arrange for removal and storage of equipment that would be damaged by low temperatures.

3. Prepare other equipment for low temperature:
   a. Bell and Howell Reader Printer - Disconnect and call service before using.
   b. MTST machine and all electric typewriters - Disconnect and do not reuse until 10 hours of warm up.
   c. Xerox machines - Disconnect.
   d. A.B. Dick Automated Press - Disconnect, clean, and remove rollers.
   e. Tape machine - Remove water.

4. Arrange for removal and storage of supplies subject to deterioration from low temperatures such as: glue, spray cans, thermal masters, mystic tape, labels, etc.

5. Notify companies that have hot and cold drink vending machines.

6. Notify all vendors to stop shipments until schools reopen.

The above tasks would resolve some problems which would result from mothballing; however, nothing could be done about the following:

1. Damage to books and AV software - sheer volume prevents removal.

2. Approval of invoices - payment would be delayed until they could be checked.
"MOTHBALLING" SCHOOL BUILDINGS

All supplies for physical education should be stored in cabinets or on shelves in a designated area. This material should not be left on the floor. It is important that all materials are sufficiently secured.

Caution should be taken to assure that the materials are sufficiently warmed up before their use. Damage will probably not occur if the temperature is gradually lowered and raised.

Audio-visual materials such as films, loop films, and projectors should be taken home and stored in a warm area since extremely low temperatures can damage this equipment.

First aid supplies, especially those in glass containers, should be put in your medicine kit and taken home for warm storage.

All students should remove belongings from lockers, this includes clothing, deodorant cans, towels, etc. Remind students they will be expected to have their physical education clothing the first day schools reopen.
CLOSING SCHOOL HEALTH ROOMS

Should the Columbus schools be closed due to the energy crisis, the following guidelines should be used to close the school health rooms:

1. Take audiometers and blood pressure equipment home to protect from loss or vandalism. Transport inside your car rather than the trunk as the audiometer may be damaged by severe cold.

2. Arrange with the school office to lock up small equipment and health records similar to the procedure for closing schools in June.

3. Call Molly Parsons if you have questions about your role or responsibilities during this crisis.
"MOTHBALLING" - SCIENCE

ELEMENTARY:

Equipment - No equipment provided by our department should suffer damage if subjected to low temperatures. If in doubt about a particular piece of equipment, call the Science Department, phone 225-2723.

Chemicals - Flush all liquid chemicals down a sink, using an ample supply of water. Allow at least a minute of water flow between each different kind of chemical. Let water run for at least five (5) minutes after the last chemical. Alcohol burner fuel will not freeze if kept in the buildings, and need not be flushed down the sink. Dry chemicals will not be damaged by the cold.

Living things -

A. Drain all aquaria, aquaria filters and pumps. Air pumps need no draining. Send all living things in aquaria home with volunteer students if possible.

B. All animals kept in small cages should be sent home with student volunteers if possible.

C. All plants and terrariums should be sent home with student volunteers if possible.
CONTINGENCY INSTRUCTIONS FOR

MOthsALIING - SCIENCE

SECONDARY:

Equipment - No equipment provided by the science department, except calculators, should suffer damage by low temperatures. Calculators should be taken home or transported to any available alternate storage area where temperatures will not go below 40 degrees F. If in doubt about a particular piece of equipment, call the Science Department - phone 225-2728.

Chemicals - Flush all liquid chemicals that may be in danger of freezing at about 0 degrees F. down a sink, using an ample supply of water. Allow at least a minute of water flow between each different kind of chemical. Don’t flush acids down with organic liquids. Most concentrated acids will withstand the low temperatures, but all diluted acids, bases and reagents should be flushed down a sink. When in doubt, dump it!

Living things -

A. Drain all aquaria and tubing. Send all living things in aquaria home with student volunteers if possible.

B. All animals kept in environmental chambers, cages, or terraria should be sent home with student volunteers if possible. Shut down all environmental chambers.

C. All plants and small terrariums should be sent home with student volunteers if possible.

D. All cultures of microorganisms should be flushed down a sink with an ample supply of water.
COLUMBUS PUBLIC SCHOOLS
SIXTH AVENUE INSTRUCTIONAL CENTER

DAINAGEABLE MATERIALS

Noted below are general elementary school materials, and
instructionally related materials which should be removed from
buildings before the building is "moth balled":

ART MATERIALS

1. Glazes
2. Turpentine
3. Varnish
4. Shellac
5. India Ink
6. Gum Solution
7. Fixative Spray
8. Vinegar
9. Tempera Paint

OFFICE MATERIALS

1. Rubber Cement
2. Spray Cans
3. Ink
4. Glues (liquid)
5. Correction Fluids
6. Mimeo Ink (remove from mimeograph)
7. Ditto Fluid (remove from Ditto machine)
8. Copier Toner (remove from Copier)
9. Copier Dispersant (remove from Copier)

CLASSROOM MATERIALS

1. Aquariums (emptied)
2. Science Kits (liquids removed)
3. Liquids - all liquids should be removed from Teachers' and Students' Desks

MISCELLANEOUS MATERIALS

1. Pop Machines (emptied)
2. Milk Coolers (emptied)
3. Nurses' Supplies (liquids should be removed)
ELEMENTARY TEXTBOOKS

Every student should take home their present reading book. All students (grades 3-6) should take home their spelling and mathematics books. Second grade students, only spelling books. Teachers may make assignments in other areas that would involve additional books going home. A record of books each student takes home should be kept by the teacher.

All books should be removed from window ledges and if possible, from exterior walls.

Students should be encouraged to participate in special programs via WCBE and other educational stations.

SECONDARY TEXTBOOKS

Students should continue to assume their responsibilities for the textbooks assigned to them.

All textbooks should be taken home.

CONSUMABLE WORKBOOKS

Consumable workbooks (mathematics, handwriting, reading, etc.) should not be sent home. Teachers may provide instruction in these books when meeting with their classes.

Separate pages from workbooks may be duplicated and used as a homework assignment. The consumable workbook resource is not easily replaced and if taken home could be thrown out, burned or misplaced. To assure that students and teachers will have this resource available when regular school resumes the duplication process should be used.

PRINCIPALS ARE REQUESTED TO DUPLICATE THIS PAGE FOR A HANDOUT TO TEACHERS.
Vocal Music Equipment

Pianos are affected more by heat and humidity than cold. Less damage would occur when the temperature is lowered and raised gradually. The pianos will probably require two or more tunings after being in extended cold temperature.

The electronic-music equipment is not affected by cold temperatures, however, it is suggested that all equipment and materials be stored on shelves off the floor to avoid possible water damage.
MOTHBALLING PROCEDURES

Secondary Vocal Music Room

Piano
- Move all pianos to an inside wall in the classroom.
- Cover the piano with a canvas or blanket if available.

Record Player, Tape Recorder and Rhythm Instruments
- Store all equipment on shelves off the floor.

Elementary Principals

Piano
- Move all pianos to an inside wall in the classroom.
- Cover the piano with a canvas or blanket if available.

Record Players, Tape Recorders, Rhythm Instruments, Autoharps, Resonator Bells
- Store equipment on shelves off the floor.

Piano Labs and Orff Instruments
- Move to an inside wall in the classroom.
In case schools are closed and buildings are "mothballed" the following procedures and precautions should be followed:

- Students should take their privately-owned instruments home.
- Students who have rented a school instrument should be encouraged to take it home.

The following precautions should be taken for instruments remaining at school—

- Strings—keep violins and violas in cases and cover cellos and string basses and store them on shelving off the floor.
- Woodwinds—be sure all moisture has been dryed out of each instrument and store in cases on shelving.
- Brasses—empty spit valves and empty out slides and tubing, store in cases on shelves.
- Percussion—cover all instruments, store drums off the floor.
- Pianos—store against inside wall, cover with piano cover or piece of cloth.
- Electronic equipment—store as usual in a dry place.

Keep all instruments away from heating units, doors or windows. The music stores tell us that all instruments can take extreme cold weather if the change of temperature is gradual. This also would apply to the restoration of heat in a building. Damage to wood instruments is usually caused by extreme heat and humidity. Be sure all instruments and equipment are stored off the floor.
To: Principals, Basketball Coaches, Faculty Managers

From: Jane Walter, Don E. McCualsky

Subject: Guidelines for Interscholastic Basketball Games and Practices

Due to the energy crisis a number of adjustments have been made in our senior high school boys' and girls' basketball programs. We will continue to have our games and to have practices. However, schools that are closed due to using natural gas for fuel will have to play all games and conduct all practices at a school site that is open due to a source of fuel other than natural gas. For both the boys' and girls' basketball we will remain with the dates that are now on our schedules but some floors will be reversed or in the case of two gas burning schools playing they will be assigned to a neutral floor.

For those schools closed due to use of natural gas a practice schedule has been made for both the boys' and girls' teams at another site.

Guidelines For Practice

1. Each school will be limited to 1 1/2 hours of practice. Varsity and reserve will practice together.

2. Individual schools should take their own equipment (balls, medicine kit, locks, towels, etc.)

3. Showers will be available for use.

4. Coach should collect all valuables from athletes for safe keeping. (Caution players not to bring valuables to practice.)

5. Coach must supervise locker room before and after practice.

6. Coach should make sure all players enter and leave the building at the same time.

7. Host schools should welcome visiting schools at first practice and assign them to locker rooms and explain about entering and leaving building.
Guidelines For Games

1. Both varsity and reserve games will be played as scheduled.

2. Original home team (girls only) whose site has been reversed or changed should notify officials.

3. At gas burning schools coaches should take home and away uniforms, warm-ups, balls, scorebooks, medicine kit, etc. home. You are not to enter your building each time you have a practice or a game for these items. Have your players take all practice and game gear home as they are not to enter your building before each practice and game.

4. At gas burning schools the faculty manager should take game tickets, money boxes, rubber stamp and pad, checks for paying officials, etc. home as you are not to enter your building before each game.

5. Buses will be available for games the same as before but not for practice.

6. When floors have been reversed e.g. Linden at Whetstone originally but reversed to Whetstone at Linden, Linden will now be the home school and the Linden faculty manager will administer the game. Be sure to notify the officials of change of site.

7. When two schools have their game assigned to a neutral floor the original home school faculty manager will administer the game at the neutral site, e.g. Marion-Franklin vs Walnut Ridge* at Centennial, Walnut Ridge* is the original home school so the Walnut Ridge faculty manager will administer the game at Centennial, take your ticket seller, ticket taker, police, etc. to Centennial. The Centennial faculty manager will be on duty at Centennial, even if his team is playing away, to assist the Walnut Ridge faculty manager in where to sell and take tickets, where to station police, where locker rooms are, to have bleachers out, to have scoreboard controls ready, to have building open and closed, etc. The Walnut Ridge faculty manager should call the Centennial faculty manager in advance of game to determine what personnel will be needed to administer the game at Centennial.
## GIRLS' AND BOYS' BASKETBALL PRACTICE SCHEDULE

<table>
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</tr>
</thead>
<tbody>
<tr>
<td>5:30</td>
<td>Beechcroft</td>
<td>Briggs</td>
<td>Centennial</td>
<td>East</td>
<td>Independence</td>
<td>Linden-McKinley</td>
<td>Mohawk</td>
<td>North</td>
<td>Northland</td>
<td>West</td>
<td>Walnut</td>
</tr>
<tr>
<td>5:00</td>
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<td>6:30</td>
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<td></td>
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</tr>
<tr>
<td>6:00</td>
<td>Mifflin Boys</td>
<td>Briggs Girls</td>
<td>Whetstone Boys</td>
<td>*** Central Girls</td>
<td>Marion-Franklin Boys</td>
<td>Mohawk Girls</td>
<td>Brookhaven Girls</td>
<td>South Girls</td>
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</tr>
</tbody>
</table>

*Marion-Franklin Boys will practice at Roosevelt Junior High at 3:30 p.m.-5:00 p.m. Thursday, February 10; Thursday, February 17; Thursday, February 24
*Brookhaven Girls will practice from 5:00 to 6:30 p.m. on Thursday, February 10
*Central Girls will practice from 3:30 to 5:00 p.m. on Thursday, February 10

Teams scheduled for practice from 5:00-6:30 p.m. or 6:30-8:00 p.m. at the following schools on the following dates will have to arrange another practice time, if possible, with the local building administrator. Possibly teams involved in these time slots could double up and practice in the 3:30-5:00 p.m. time slot. (There will be no practice at any school on Fridays)

**February 8**
- New Albany at Briggs
- Whitehall at Independence
- Whetstone vs Mifflin at Beechcroft
- Marion-Franklin vs Walnut Ridge at Centennial

**February 9**
- Eastmoor at East
- Central at Linden-McKinley

**February 14**
- Central at Mohawk
- Northland at East
- Marion-Franklin vs Mifflin at Independence
- Brookhaven at North
- Linden-McKinley at West
- Eastmoor vs Whetstone at Beechcroft
- South at Briggs

**February 15**
- Walnut Ridge at East
- Mifflin vs South at West
- North at Mohawk
- West at Northland
- Whetstone vs Marion-Franklin at Linden-McKinley
- Eastmoor vs Brookhaven at Briggs
- Central at Independence

**February 16**
- North at Northland
- Marion-Franklin vs Mifflin at Independence
- Brookhaven at North
- Linden-McKinley at West
- Eastmoor vs Whetstone at Beechcroft
- South at Briggs
Columbus Public Schools
Department of Physical and Health Education
February 1, 1977

Revised City League Boys' Basketball Schedule

February 7
Monday
West at North

February 8
Tuesday
New Albany at Briggs

February 9
Wednesday
Eastmoor at Central
Central at Linden-McKinley

February 10
Thursday
Marion-Franklin vs Central

February 11
Friday
Central at Mohawk
Central at Linden-McKinley

February 12
Saturday
Central vs Mifflin

February 13
Tuesday
Central at Linden-McKinley

February 15
Tuesday

Walnut Ridge at East

(Originally at Walnut Ridge)

Mifflin vs South* at West

North vs Mohawk

West at Northland

Whetstone vs Marion-Franklin*

Linden-McKinley

Eastmoor vs Brookhaven* at Briggs

Central at Independence

Briggs at Zanesville Rosecrans

February 16
Monday

Marion-Franklin vs South* at West

North at Mohawk

West at Northland

Whetstone vs Marion-Franklin*

Linden-McKinley

Eastmoor vs Brookhaven* at Briggs

Central at Independence

Briggs at Zanesville Rosecrans

February 17
Tuesday

Walnut Ridge vs Mifflin*

South at North

Mohawk at West

Whetstone at Northland

(Originally at Whetstone)

Marion-Franklin vs Eastmoor

at Independence

Brookhaven at Linden-McKinley

Briggs at East

Home team at neutral site (Home school faculty manager administer game in cooperation with host school faculty manager).

Designates home team when floor reversed.

*Home school faculty manager will administer game.
Senior High Girls' Basketball Games

**North Division**

<table>
<thead>
<tr>
<th>Date</th>
<th>Opponents</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 10</td>
<td>Mifflin-*Whetstone at North</td>
<td>5:30 Reserve</td>
</tr>
<tr>
<td></td>
<td>North at Northland</td>
<td>7:00 Reserve</td>
</tr>
<tr>
<td></td>
<td>Linden-McKinley at East</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td>February 17</td>
<td>Whetstone at North</td>
<td>5:30 Reserve</td>
</tr>
<tr>
<td></td>
<td>Northland at Linden-McKinley</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td></td>
<td>*Brookhaven at East</td>
<td>7:00 Varsity</td>
</tr>
</tbody>
</table>

**South Division**

<table>
<thead>
<tr>
<th>Date</th>
<th>Opponents</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7</td>
<td>Central at West</td>
<td>5:30 Varsity</td>
</tr>
<tr>
<td></td>
<td>Eastmoor-*Marion-Franklin at West</td>
<td>7:00 Reserve</td>
</tr>
<tr>
<td></td>
<td>South at Mohawk</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td></td>
<td>Independence at Briggs</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td>February 10</td>
<td>*Marion-Franklin at Mohawk</td>
<td>8:30 Varsity</td>
</tr>
<tr>
<td></td>
<td>South at Independence</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td></td>
<td>Eastmoor at West</td>
<td>5:30 Varsity</td>
</tr>
<tr>
<td></td>
<td>*Walnut Ridge at Briggs</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td>February 17</td>
<td>Independence at Mohawk</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td></td>
<td>*South at West</td>
<td>5:30 Varsity</td>
</tr>
<tr>
<td></td>
<td>Walnut Ridge-*Eastmoor at Independence</td>
<td>7:00 Varsity</td>
</tr>
<tr>
<td></td>
<td>Central at Briggs</td>
<td>7:00 Varsity</td>
</tr>
</tbody>
</table>

*Indicates home team*

Thursday, February 24, 1977
Championship Game - 7:30 p.m.
Independence Jr. Sr. High School
Columbus Public Schools
Department of Physical and Health Education
February 1, 1977

To: Coaches of Junior High Girls' Basketball Teams
From: Jane L. Walter, Supervisor

Due to the energy crisis many of our schools will be closed, therefore, the Junior High Girls' Basketball season will be postponed until we return to school in March.

Contact the officials that you have secured for your home games and inform them of this postponement.

A revised schedule will be sent to you in the near future.

Approved: Edwin J. Milton
To: Principals, Wrestling Coaches, Faculty Managers

From: Don B. McCaulsky

Subject: New Dates and Site for Reserve and Varsity Wrestling Tournament

Due to the heating system at Northland, being converted to fuel oil and to the school calendar being revised the 1977 City League reserve and varsity wrestling tournament will be conducted as follows:

Wednesday, February 9, at Northland, seeding meeting, starts at 9:00 a.m.
Thursday, February 10, at Northland, Reserve Tournament, starts at 2:00 p.m.
Friday, February 11, at Northland, Varsity Tournament, starts at 2:00 p.m.
Saturday, February 12, at Northland, Reserve Finals, starts at 12:00 noon
Saturday, February 12, at Northland, Varsity Semifinals, starts after reserve finals
Saturday, February 12, at Northland, Varsity Finals, starts at 7:00 p.m.

Chuck Doyo will continue as tournament manager and Paul Wrobbel will serve as tournament director. They will be sending further information soon.

Guidelines for Practice When Schools Are Closed in February

1. Schools that remain open will hold wrestling practice from 3:30-5:00 p.m. in their practice area if it is available at that time. If not start your practice as soon as possible and work visitors in 1 1/2 hours later.

2. Neighboring schools, classic because they are heated with natural gas, should make arrangements with a neighboring school to practice from 5:00-6:30 p.m. or as soon as the host school finishes practice if they start after 3:30 p.m.

3. Each school will be limited to 1 1/2 hours of practice. Varsity and reserves will practice together.

The host school coach please cooperate in every way possible to make your practice facilities available to your neighboring school/s.

Individual schools should take their own equipment (medicine kit, locks, towels, etc.).

Each school should collect all valuables from athletes for safe keeping. (Caution athletes not to bring valuables to practice.)

Coaches must supervise locker room before and after practice.

Each school should make certain all athletes enter and leave the building at the same time.

Host schools should welcome visiting schools at first practice and assign them to locker rooms and explain about entering and leaving the building.

At gas burning schools coaches should take uniforms, warm-ups, medicine kit, etc. home. You are not to enter your building each time you have a practice or a contest for these items. Have your players take all practice and game gear home as they are not to enter your building before each practice and match.

Thank you for your cooperation in this emergency.
TEACHER PERSONNEL

All non-classroom assigned certificated personnel in your building can be reassigned in your emergency schedule as the principal and staff arrange.

Substitute teachers may be used to provide educational services during the emergency when the principal determines it is necessary during the scheduled class time in a school facility that is open. Long-term assignments may extend beyond that.

Four categories of need are currently foreseen:
1) Substitutes already in a long-term assignment.
2) Substitutes replacing teachers who have been reassigned to the media effort.
3) Day-to-day substitutes—when and if needed to supplant the services of an absent teacher.
4) Use normal channels by calling Substitute Services to fill your needs and to release substitutes no longer needed.
Payroll reporting for teachers during the "School Without Schools" emergency period of February 7 through February 25, 1977, will be handled in a unique manner. Principals will be responsible, as usual, for the payroll reporting of teachers normally working in their schools even though teachers are temporarily performing other duties during this emergency. The following instructions were developed to provide accuracy and accountability with a minimum of hassle.

Two reporting forms will be used:

1. **EMERGENCY WORK SCHEDULE STATEMENT** (attached and shown properly completed) is to be given to each teacher at your earliest convenience. This statement will be completed by the teacher indicating any use of sick leave, personal leave, or absence without pay during the emergency period, signed by the teacher and returned to you on February 25, 1977, the close of the emergency period. REMIND teachers that absence due to illness or death in their families should be reported as sick leave used.

2. The **TEACHERS PAYROLL REPORT** is a computer list of all teachers normally working in your school. It will be sent to principals along with appropriate instruction during the last week of the emergency period. It will be completed by the principal using information submitted by each teacher on the EMERGENCY WORK SCHEDULE STATEMENTS. The TEACHERS PAYROLL REPORT will be signed by the principal and it alone will be sent to the Payroll Section as
soon after the close of the day Friday, February 25, as possible. Retain in your permanent files the EMERGENCY WORK SCHEDULE STATEMENTS and the carbon copy of the TEACHERS PAYROLL REPORT.

The form "Report Of Employee Absence and Substitute Assignment" and the green "Certification of Absence" will be temporarily discontinued during the emergency period as it relates to teachers regularly assigned in your building. The form will be used only to indicate substitute assignments. These should be sent in immediately after the completion of the substitute assignment as usual.

All other payroll reporting will remain normal.
COLUMBUS PUBLIC SCHOOLS

EMERGENCY WORK SCHEDULE STATEMENT
February 7 through February 25, 1977

1. **JANE Doe**
   (Teacher's Name--Please Print)  
   987-12-6543  
   (Soc. Sec. No.)

2. **ENGLISH TEACHER**  
   (Regular Assignment)  
   BROOKHAVEN  
   (Location)

3. These days were used as sick leave:  
   2/8, 2/16  
   (List the Dates)  
   2  
   Total

4. These days were used as Personal Business:  
   2/12  
   (List the Dates)  
   1  
   Total

5. Other Non-Work Days (Please Explain).  
   2/14  
   ABSENCE WITHOUT PAY  
   1

6. The remaining days of the Emergency Schedule were used to provide educational services.

I certify that the foregoing statements are correct:

[Signature]

RETURN THIS FORM TO YOUR PRINCIPAL OR SUPERVISOR ON FRIDAY, FEB. 25, 1977.
## Payroll Schedule

**February 4, 1977**
- Operating (Custodians, Clerks, Food Service, Aides checks to normal, except aides leaving payroll - checks go in U.S. mail Thursday P.M.

**February 11, 1977**
- Aides time sheets go out to temporary Administrative Units.

**February 14, 1977**
- Aides time sheets due back to payroll.

**February 18, 1977**
- A Plan Teachers, Operating - checks to to temporary Administrative Units.
- Teachers Payroll Sheets go out.

**February 23, 1977**
- Aides time sheets go out.

**February 25, 1977**
- (Friday)
- Administrators and B Plan Teachers moved up from 2/28/77. Checks go to temporary Administrative Units.
- Teachers Payroll Sheets due back to payroll.
- Aides time sheets due back to payroll.

**March 2, 1977**
- Revised payday for Operating. All schools closed. Checks will be available at Education Center or delivered Monday, March 7, 1977 to regular schools.

Office of the Clerk-Treasurer
February 4, 1977
Senior High School Counselors

- Re-schedule activities already planned. Example: College admission testing; i.e., ACT or SAT test dates and locations may need re-set, and students will need to be notified at once.

- Parent conferences or meetings to explain the PCS (Parent Confidential Statements) and other scholarship possibilities which are in process and pending such as BEOG and OIG.

- College and Technical School representatives traditionally visit with seniors at this time.

- Continue to work with overall scheduling procedures. Example: Subject selection for current 10th and 11th grade students for 1977-78 school year.

- Examine senior schedules and identify deficiencies which could delay graduation.

- Contact Columbus Plan students in their buildings to formalize plans for 1977-78 school year.

- Contact all other students and their parents with regard to Columbus Plan opportunities.

- Supplement this with radio, TV, and regional newspaper spot notices about the Columbus Plan.

Vocational Guidance Coordinators

- Continue to recruit students for vocational programs by phone, in the home, or at a central location.

- Continue to work with current vocational students and parents in order to build a schedule which will accommodate the vocational program and still allow the student to participate in extra-curricular activities and still graduate on schedule.

- Follow up the first-year vocational students and assist them in planning their second year vocational program.

Junior High School Counselors

- Columbus Plan and scheduling information, similar to senior high activities, by phone or at a designated location, as noted.

- Meet with elementary counselors and administrators and formulate articulation procedures for 5th grade students moving to junior high school.
Elementary Counselors

. Columbus Plan information, by phone or in conference, as junior high school.

. Continue processing forms needed for tutoring, psychological testing, and special class placement.

Psychologists

. Conduct parent conferences, by phone or in person, in the home or at a designated station.

. Re-schedule testing appointments which are cancelled.

. Conduct teacher conferences on children already seen.

. Test and make recommendations for children who are currently on the waiting list for Special Class placement.

. Test children identified as "handicapped, and not served" who are known to live in the district, who must be programmed and placed in a school setting - H.B. 455. (This can be done in private homes or in a designated public location.)

. Write up cases already seen.
TELLING OUR STORY

Since unusual happenings make news, the School Without Schools project should provide abundant opportunities for coverage by all media. Will you please assume responsibility for keeping Mrs. Bowen and Mr. Coldren advised of unusual developments involving your pupils or your staff. Mrs. Bowen may be reached at 225-2814, and Mr. Coldren, 225-2860. If you prefer to forward your news tips to them in writing, please provide the information requested on the form below.

---

To: Department of Information Services

From: School or Department ________________________________

News item, activity, or meeting:

What?

When?

Where?

Who?

Why? (or other details)

Additional news or feature possibilities

Signed ________________________________

Date ________________________________ Phone ________________________________

(2/2/77)
Special Education Organization during the "Schools Without Schools"

1. **Special Education Office - Mr. Caron**
   
   Mr. Caron and his secretary, Mrs. Ziegler, are officed at 52 Starling Street (225-2692).

2. **Transportation and Home Instruction - Mrs. Bess**
   
   Mrs. Bess and her secretaries will be officed in the main Board Building (225-2706).
   
   Home instruction continues as usual.
   
   Juvenile Center teaching program continues as usual.

3. **T.V. Coordination and Logistics - Jack Dauterman**
   
   Mr. Dauterman, the LEO and EMR T.V. coordinator, is officed at 52 Starling Street (225-2692).

4. **Colerain and the secondary orthopedic program - Mrs. Zollinger (267-0333)**
   
   Colerain elementary orthopedic program continues as usual (full-time).
   
   Secondary orthopedic programs for Westmoor, Independence, and Marion-Franklin - We are now planning to use an alternative facility, perhaps Franklin County Crippled Children's Society on a once a week basis.

5. **A. G. Bell Program - Mr. Ward**
   
   A. G. Bell office moves to Kingswood (294-3176).
   
   A. G. Bell elementary program will be housed at Gables (251-0183) and Kingswood (294-3176).

6. **Clearbrook Program - Mrs. Castner**
   
   Clearbrook office moves to Mohawk (228-4581).
   
   Clearbrook program on individual instruction. Teachers will contact the parents.

7. **EOG and T.V. Program**
   
   T.V. coordinated by Kay Teagardner.
   
   Secondary EOG will be transported on the day that their school meets.
   
   Elementary EOG programs are on individual instruction. Students who live in the school's district can go to the alternative site and teachers will arrange transportation for transported students.
8. **Mental Health - Mr. Penwell**

   Mr. Penwell will be office at 52 Starling St. (225-2745).

   His program continues as usual.

9. **LBD and LBO Tutoring - Mrs. Serio**

   LBD office moves to Starling St. (225-2745)

   There will be no transportation for LBD classes. Teachers will provide individual instruction and contact parents.

   The autistic program continues one day per week in Alum Crest's apartment school.

   LBD tutoring continues. The LBD tutor president, Mrs. Nancy Snook, has been advised to inform her tutors to be creative and ingenious and in fact we want them to complete their allocated hours.

   Marie Tooker is the T.V. coordinator.

10. **Speech Therapy - Dr. White**

    Dr. White and Secretary office at Gables Elementary (451-0188)

    Therapists will give therapy in the school that their clients attend.

11. **Visually Handicapped and Itinerant Program - Mrs. Gullion**

    Broadleigh School is closed. The visually handicapped program at Broadleigh and in the secondary schools will continue on an individual instruction basis. Teachers and itinerant teachers will contact parents.

    Mrs. Gullion will be office in her home (231-4203).

12. **Total Communication and Ohio Deaf - Mrs. Werner**

    Glenmont will be housed at Clinton Elementary 5 days. The secondary program will be individual instruction and parent transportation to the Ohio School for Deaf, one-half day unless C.S.J. closes.

13. **Family Learning Center - Dr. Barnabey**

    This program is office at Colerain School - program continues.

14. **Other Programs**

    The following programs continue uninterrupted:

    - Upham Hall
    - St. Vincents
    - Children's Hospital
    - Juvenile Center
    - Doid-Means
    - Florence Crittenten
I have inspected and approved the following non-school facility (ies) and request that it (they) be placed on the list of approved facilities for instructional purposes during the energy crisis period.

<table>
<thead>
<tr>
<th>Name and Address of Facility</th>
<th>Owner of Facility</th>
<th>Number of Children To Be Accommodated</th>
</tr>
</thead>
</table>

Name of School

Principal/Administrator
Signature

The non-school facility (ies) listed above have been placed on the list of authorized facilities to be used for instructional purposes during the energy crisis.

Signature

(2/3/77)
FIRE AND EMERGENCY EVACUATION

All principals are to insure that staff and students are familiar with the building or facility they are in during the "School Without Schools" program. Fire drill instructions and instruction in case of an emergency evacuation must be developed and explained to the staff and students.

If your program is conducted in a school building, the fire drill and evacuation plan for that building should be used and existing directions noted at the initial meeting of your program.

If the "School Without Schools" program is conducted in a non-school building, principals must plan for fire or emergency evacuation of staff and students.

The plan developed for a non-school building should be recorded by the principal and discussed with staff and students during the initial meeting and as often as necessary to assure that all personnel are informed and competent to react to an emergency situation.

The "building" principal is responsible for the emergency fire and evacuation procedure initiated for their students. Fire Department officials will communicate as necessary with building principals as in the past.
<table>
<thead>
<tr>
<th>TIME</th>
<th>VIDEO</th>
<th>AUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30</td>
<td>C.U. BOOK</td>
<td>Teacher intros beginning lesson...</td>
</tr>
<tr>
<td></td>
<td>MCU Teacher</td>
<td>General information on lesson continued...</td>
</tr>
<tr>
<td></td>
<td>CU Flip stand (Pages of book 11X14 cards)</td>
<td>Teacher begins reading lesson... several</td>
</tr>
<tr>
<td></td>
<td>VTR/cassettes (Students involved in</td>
<td>pages of text will be read.</td>
</tr>
<tr>
<td></td>
<td>reading project) 1:15</td>
<td>Silent/Teacher will voice over cassette</td>
</tr>
<tr>
<td></td>
<td>G.U. Objects on desk</td>
<td>Teacher refers to objects on desk</td>
</tr>
<tr>
<td>8:30</td>
<td>C.U. Teacher</td>
<td>Closing remarks</td>
</tr>
<tr>
<td></td>
<td>MCU Carol Cheney</td>
<td>Introduction to break... and next unit.</td>
</tr>
</tbody>
</table>

(Note: when referring to Teacher use the individual's last name).
Think Visually

Think in terms of pictures as well as sound at all times when planning your program.

The value of video must not be minimized. Commercial broadcasters in selling television announcements and programs, consider the visual portion of them to be worth about 75% of the value and the audio portion only 25%.

Then you begin to plan the production of your presentation on television, think first in terms of what will be seen, then in terms of what will be said.
Plan Visuals

The primary objective of using visual materials on television is to help present your ideas more clearly. A secondary objective for the educational broadcaster is showmanship.

Here are some criteria that should be considered in selecting visual material for your program:

1. The material must be the best tool for the job.
2. The material must be easy to understand.
3. The material must be interesting.
4. The whole set must be thought of as a visual.

Aspect Ratio

The television picture is always 3 units high by 4 units wide. This horizontal aspect ratio of 3:4 is unchanging and cannot be compromised. Remember this when planning all of your visual material.
Projected Visuals
MOTION PICTURE FILM

CONSIDERATIONS IN THE USE OF FILM

1. CONTENT

Films should be carefully selected and previewed for content. Content should be appropriate to the program objectives, the age level and interest of the viewers, and the policies of the station.

Most motion picture film was not designed to be seen on a 21-inch screen. It is advisable that you preview your film projected at this size so you will see the picture as your viewers will.

2. SPEED AND SIZE

Only 16 mm film taken at sound speed (24 frames per second) can be used on television.

3. SOUND OR SILENT

Either sound or silent film can be used, provided the silent film was taken at sound speed. A sound film can be used as a silent film on TV, using your commentary live from the studio.

4. CONDITION OF THE FILM

Avoid films with scratches and considerable splicing. Often words or phrases on the soundtrack are lost in splicing and there may be an awkward moment for audio. The film should have clear images and sound.

5. AVAILABILITY

In choosing any film, allow enough time for booking so it will be received at least a week before the program. It can then be previewed by you and your producer to determine if it will be suitable for use on your program.
USE OF MOTION PICTURE FILM

Film on television can be used either as complete story sequences (complete film) or as portions of complete films or short film scenes (film clips).

USE OF COMPLETE FILMS

Complete films can be presented as the entire program or as the main feature of the program.

USE OF FILM CLIPS

A film clip is a scene rather than a complete story. The film clip may be a portion of a complete film or it can be film produced specifically for your program.

It is frequently desirable to use film clips rather than complete films due to the limitations of telecast time. However, film producers vary in their attitudes toward the use of portions of their films, and permission for broadcast should include a specific authorization for their use.

Film clips are also frequently desirable because a short sequence in a long film may be especially pertinent to the lesson or program while the complete film would not be so useful.
SLIDES

In television, many visuals are photographed on 35 mm film for projection as 2" x 2" slides. If your 35 mm slides are selected from an audio-visual library or produced by an amateur photographer, these are good criteria to follow in their selection and preparation for use.

1. Slides should be oriented horizontally, not vertically.

```
RIGHT

WRONG
```

2. Content should be well centered, allowing for a marginal loss of the picture when it is seen on the TV receiver.

```
2"
15/16

CRITICAL COPY AREA

1 13/32

USABLE TV WIDTH
```

The 2 by 2 inch dimension of these slides is the outside dimension. The camera field is considerably inside this. The aspect ratio of the standard 2 by 2 slide is not the 3:4 aspect ratio of the television picture. (The picture area on the slide is wider in proportion to its height.) A certain amount of picture area must be lost on each side when such a slide is projected on television.
3. Content should be large enough to read. Avoid small detail.

4. Content should have a good contrast range from light to dark. (Watch this particularly when using color slides.)

5. Slides for superimposing on film or live studio scenes can be made with black lettering on a white or off-white posterboard for photographing. The negative film (black field with white lettering) can be used for super slides.

6. Slides should always be arranged in sequence, labeled and numbered. Check with your producer on how to label your slides as each station differs in its method.

7. Slides must be glass mounted and bound with tape.
Two-Dimensional Visuals

GRAPHICS

CONSIDERATIONS IN THE USE OF GRAPHICS

Watch for these points in the selection and preparation of graphic material for your educational television program:

1. Be sure that the material is appropriate to the purpose of your program.

2. Be sure the material is simple, uncluttered, and to the point.

3. Graphics should always be in the 3:4 aspect ratio.

4. Be sure the copy is well centered within the outside dimensions.

A good method of establishing copy area on your graphics is "The Rule of One-Sixth." One-sixth of the width on each side and one-sixth of the height, at top and bottom, should be considered only supplementary area.

The Rule of One-Sixth
5. Be sure the material can be read as a unit on television.

6. The size of the graphic material depends upon its intended use.

   An 11 by 14 inch card is best used off-set.

   A 24 by 32 inch chart can be readily used and seen as on on-set.

7. Be sure the material is in good condition. Erase all smudges and rough penciling from illustrative cards and picture mounts.

8. Be sure that colors will remain in contrast after conversion to monochrome. Only four or five shades of gray can be clearly delineated on television. In choosing combinations of color, use dark colors against light colors -- but never white against black.

---

**EQUIVALENT MONOCHROME SHADES FOR COLOR**

<table>
<thead>
<tr>
<th>COLOR</th>
<th>EFFECT ON TV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dark blue, green, brown</td>
<td>Dark gray or &quot;black&quot;</td>
</tr>
<tr>
<td>Light blue and other pastels</td>
<td>White</td>
</tr>
<tr>
<td>Bright red, blue, green</td>
<td>Medium Gray</td>
</tr>
</tbody>
</table>

The actual shade of the color depends a great deal on how the chart is lighted and on the electronic adjustments of the TV camera.

If you are in doubt about the contrast range of a visual, request to have it previewed on the TV system before the day of the program.
9. Use a bold, clean-cut hieroglyphic style drawing. Cartoon simplicity is extremely readable. If you are an amateur, try the stick-figure technique.

10. Use appropriate sized letters. Lettering for charts used as ON SET visuals must be at least two inches high. Try to limit your copy to three or four lines per chart.

Below are some samples of commercial lettering available for your use on a limited basis. By duplicating the relationship between height and stroke of these letters, your hand-lettered graphics will be more effective on TV.

**SMALL LETTERING IS SUITABLE FOR OFFSET GRAPHICS**

**EDUCATIONAL TELEVISION**

**EDUCATIONAL TELEVISION**

**CERTAIN DECORATIVE STYLES ARE DIFFICULT TO READ ON TV**

**Educational Television**

**Educational Television**

**LARGER LETTERING IS BEST USED FOR ONSET GRAPHICS**

**EDUCATIONAL TELEVISION**

**EDUCATIONAL TELEVISION**

USE WHITE LETTERS ON A BLACK BACKGROUND FOR GRAPHICS TO BE SUPERIMPOSED OVER ANOTHER SCENE OR PICTURE.
11. If photographs are used as graphics, be sure they are mounted smoothly, without wrinkles to pick up and reflect light into the camera. Photographs should be a minimum of 8 by 10 inches. Smaller photographs can be used, but they are not advised. Photographs should be printed on matte paper. If the photo is glossy it will have to be treated with a harmless dulling wax spray before it can be used.

12. If a series of graphics is to be used on your program, either ON-SET or OFF-SET, it is best to have them all the same size or mounted on the same size backing.

13. Don't use commercial maps. The lines are too busy and confused. Make an outline map using bold lines of black or white on a gray card.

14. Replicas of art are usually copyrighted and must be used only with the written permission of the copyright owner. Any art work to be hung should be brought to the studio ready to hang. Remember to describe the color of all art work during the program since this is not color television.
THE BLACKBOARD

In television, just as in the classroom, the blackboard proves to be an efficient and effective visual device.

CONSIDERATIONS IN THE USE OF THE BLACKBOARD

1. The blackboard should be clean. (Wipe with straight strokes from the top to the bottom with a cloth or the blackboard eraser. Never wash a blackboard used on television.)

2. Chalk should be white or yellow for contrast and thicker and softer than for normal blackboard use. (Television chalk is usually ½ inch square, thus assuring a broad readable stroke.)

3. All copy should be planned for television aspect ratio.

Sentences should be blocked rather than written from one end of the blackboard to the other. If it is necessary to write clear across the board, the entire board should be considered as a chart and the size of your letters proportioned accordingly.

The blackboard is best divided into nine 3 x 4 sections so that each section can be framed as a unit in close-ups.

AS ONE VISUAL

AS NINE VISUALS
GUESTS

In the planning of your program, you may wish to ask guest experts or authorities in the field to appear on your program. There are certain precautions to take when planning for the appearance of a guest on your program.

1. Be sure your guest will add something to the program.

2. Be sure your guest is aware of the audience's level of knowledge and ability to understand.

3. Don't impose on your guest by asking him to prepare his own television program. Production responsibilities should be under your control at all times.

4. If your guest presents controversial material, be sure the opposing views are recognized.

5. Be sure your guest's material is accurate.

Avoid the temptation to use children on your program. The awesome environment of the television studio has a strange effect on the attitude and response of children. Here are some pointers to remember in considering the use of children on your program.

1. Try to find a way to do the program without using children.

2. Don't ask children to make a presentation, but try to create a natural situation for them.

3. Try to find a way to do the program without using children.

4. Rehearse the children thoroughly before they arrive at the studio.

5. Try to find a way to do the program without using children.

6. Arrive with the children early to allow them to get accustomed to the television studio.

7. Try to find a way to do the program without using children.
THE TV CAMERA IS SELECTIVE

Because of the camera's unique ability to be highly selective, the designing of a set for television is much less critical than for any other media.

Your first introduction to a television studio with its webs of cables, lights and other equipment in the vicinity of the playing area has shown you how important a role the camera's selectivity plays in the production of a television program.

In planning the set for your series, one of the important points that should be kept in mind is the amount of space you will have allotted in the studio for your program.

Therefore, when planning your set, be aware of the camera's selectivity and constantly work to conserve studio space.
Prepare Scripts

The television script is a very important part in the planning and execution of your program. With the television script, the studio crew will know exactly what you are going to do just before you do it. The script will also help you to more clearly visualize your presentation as the viewer will see it.

The preparation of your television script will be much easier if you follow carefully the procedures outlined on the next few pages.

Television script preparation involves:

- Format of the Television Script
- Preparing Rough Draft
- Timing Your Script
- Consulting with Your Producer
- Preparing Final Draft
Format of the Television Script

The television script is simply an outline of your program with indications of what the viewer will see as well as hear.

The script is divided into two columns:

The left column is labeled VIDEO and includes all of the things you want to show or do.

The right column is labeled AUDIO and includes an outline of the things you will say during the program.

At the top of the script you should include the following information:

- Name of program
- Date of program
- Time of program
- Station
- Your name
- The names and telephone numbers of your guests.

<table>
<thead>
<tr>
<th>PROGRAM: Arts &amp; Crafts</th>
<th>STATION: WRGB</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATE: December 5</td>
<td>TIME: 9:30</td>
</tr>
<tr>
<td>TALENT: George Weinheimer</td>
<td></td>
</tr>
<tr>
<td>GUESTS: Dr. and Mrs. Edgar Klugman (FR 4-2991)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VIDEO</th>
<th>AUDIO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
How to Time Your Script

When you prepare the rough draft of your script, careful attention should be given to the timing of your program.

Your program can be easily divided into several individual segments. After you find out from your producer how much time you will have allotted to you in your program, distribute the time equally to all segments of the program. Then decide which segments will need more time and which segments you can borrow time from.

Time each individual segment loosely -- within the closest minute.

It is important that you start your program smoothly to build interest and minimize channel switching. It is equally important that your program close smoothly to leave the viewers with the impression that everything has gone as planned.

The most rehearsed portions of your program should be the first and last minutes. Plan and time these small portions very carefully so that you can open and close your program with precision and finesse.

When indicating the time for each individual segment on your script, two times must be given. First, indicate the time of each segment. Then indicate the cumulative time from the beginning of the program to the end of that segment.

Allow for unexpected adjustments of time -- running over or under. If you allow for summarizing remarks toward the end of your program, they can be eliminated if you are running over or can be a more complete review if you are running short. Have pertinent extra-fill material on hand in case you need it. More often people run under time than over.
Preparing Final Draft

After the script conference with your producer, the approved rough draft is then transferred to final television script form.

Your final television script is to be typed, allowing plenty of white space, and submitted to your producer in four (4) copies no later than one week before your program.

The television script is a very functional part of the tools the studio crew will work with in the production of your program.

There are four important things to keep in mind about your television script:

1. Keep it simple
2. Allow plenty of white space
3. Be precise in your video instructions
4. Be accurate in your audio cues

How to Prepare Final Draft

Records

In indicating recordings on your script, the following information is necessary and is included on the AUDIO side of the script:

1. Record title
2. Selection title
3. Band and side number
4. Exact time the selection plays
5. Whether the entire section (or band) is played or if just a timed portion is to be played.
6. A cue line consisting of the complete sentence (approximately 15 words) you will say just before you want the record to begin.
7. Whether the record is to be the only audio to be heard (indicated as RECORD FULL) or whether you want the record to be in the background behind your talking or a film (indicated as RECORD CHEEKS).
FILM

In indicating film on your script, the following information is necessary on the VIDEO side of the script:

1. The word "FILM" if only one film is used in the program. If more than one film is used in your program, note in the video portion of the script as "FILM CLIP 1" and "FILM CLIP 2" etc., indicating a brief descriptive title.
2. Indicate the exact time each clip runs.

On the AUDIO side of your script, the following notations are necessary in the use of film:

1. Whether or not you will use the sound track on the film itself (SOUND ON FILM -- abbreviated as SOF) or whether you want to supply the commentary yourself from the studio (indicated as VOICE OVER),
2. A cue line for the film in the form of a definite sentence about fifteen words long which you will say immediately before you wish the film to appear.

SLIDES

In indicating slides on your script, the following information must be contained on the VIDEO side of your script:

1. The slide number. (All slides used on your program are numbered consecutively and must be used in that order.)
2. A brief descriptive title, coinciding with the description you will give when calling for the slide.

VISUALS

When you indicate on the VIDEO side of your script the use of a visual, the following information should be included:

1. Whether the visual is used ON SET or OFF SET.
2. When only portions of the visual will be shown and the camera moved about on it.
3. A descriptive title of the visual.

The indications on the AUDIO side of your script for slides or visuals should contain an approximate indication of what you will be saying at the time you wish the visual or slide to appear on the screen.
Movements on Camera

MOVE SLOWLY AND RELAXED

You can show your enthusiasm in other ways than by flitting around the set. Don't strain to be enthusiastic. Quick movement is difficult to follow with the camera and indicates poor planning. All movements should be according to plan as indicated on your script.

GIVE OBVIOUS CUES

Before you walk from one part of the set to another, or change visuals, give the director an obvious cue as to your intentions. For instance, if the next part of the program will take place across the set at the blackboard, before you cross you can say, "Let's go over to the blackboard and examine this in a little more detail..." Or, if you are showing an object and want a closeup of it, you can say something like this, "Now let's take a close look at the detail on this object..."

WATCH THE CAMERA LIGHT

If the camera light on your camera goes off, indicating that the other camera is on, turn slowly and casually to the one that is on. Don't snap your head with an "Oh there you are" expression on your face. The movement from one camera to another is best done by looking down at the work you are doing and then looking up into the lens of the other camera.
Use of Visuals on Camera

TECHNIQUES IN USING PROJECTED VISUALS

YOUR COMMENTARY OVER SILENT FILM

If you wish to give a commentary over a silent film, you must synchronize your remarks with the film continuity by watching a monitor in the studio. Voice-over-film commentary should be preceded by a careful rehearsal and handled ad-lib during the telecast. Usually it is best for the amateur to avoid trying to follow a script, as he may find himself stumbling in an effort to stay with the film. In general, it is wise to plan broad statements about the action rather than specific statements that require close synchronization. The use of two voices in conversation is often more desirable than the use of one voice.

DON'T ASK DIRECTLY FOR SLIDES ON THE AIR

The cue is the same as for any photo or drawing. "I'd like to show you some pictures of these French Postcards. The first one shows..." On the television screen, the viewer cannot distinguish between a live visual and a slide. It is best to eliminate any possibility of a distraction by not calling attention to the fact that the visual is on slide. Always be prepared to alter your remarks if the wrong slide appears.

USE CARE WITH REAR-SCREEN PROJECTION

When you are using rear-screen projection on your program, find out from your producer the limits of the area which is lighted before you go on the air. Lighting a rear-screen is extremely critical and your movements will have to be contained within the lighted area.
Other Studio Elements

THE CLOSEUP CAMERA

In almost all instances, one of the two cameras used on your program will be the closeup camera. Since this camera is reserved solely for closeup work, there is no need to look through its lens when it is switched on the air. Find out from your producer which will be "your" camera and which will be used as the closeup camera. Then look through the lens of "your" camera at all times -- even when the camera light is off -- until cued to the other camera by the floor manager.

THE MONITOR

The monitor is in the studio for your use during closeups. Never watch to see how you look on TV. Never watch to see if the director has the picture that you expect him to have. Your audience is distracted when you look off to one side and more than one performer has watched the monitor during a program and found himself waiting for the person on the screen to say something.
NEVER ACKNOWLEDGE CUES

Your producer or the floor manager will be giving you a constant stream of cues from the time you go on to the time you sign off. Never acknowledge the cues in any way -- not even the twitch of an eyelash. Remember, you know what you're nodding at when you acknowledge a cue, but your viewer doesn't.

BE INTERESTED

Don't fidget, stare around the studio, look nervous or look bored. Show a vital interest in what you say or do as well as what others on the program are saying and doing. You never know when your picture is on the air, even when you're not talking.

IGNORE DISTRACTIONS

Ignore the movement and actions of the crew with the exception of the floor manager or your producer. If you watch somebody walking across the studio your viewers will be distracted when they see your eyes wander.

NO AMATEUR DRAMATICS

The viewer makes no charitable distinction between network, film and local programs. He sees professionally-produced drama on TV every night of the week, and expects a quality which no amateur group can hope to achieve. Even using professional actors, local programs can't compete with New York or Hollywood in the dramatic field. Please! No dramas, no skits.
DON'T DO A RADIO PROGRAM ON TELEVISION

Too many groups indulge in panel discussions, and nothing is more deadly on television. In order to educate, a lot of talk is necessary, but it can be made infinitely more interesting if good use is made of visual aids. Network panel shows are successful only because their participants are famous personalities, experts at the TV trade, prominent in the news or involved in real controversy.

AVOID MOB SCENES

A mob scene -- for our purposes -- is anything more than five people in one setting. Usually, three or four is better than five. A good program depends on content -- not on the number in the cast. And no "cast credits" at the end of the program, please.

NO AMATEUR "EXPERTS," PLEASE

Many people feel, when they have been exposed to a couple of TV shows, that they are "experts" and automatically qualified to handle a television program in any capacity. What they don't realize is their own ignorance in a highly technical business. It takes years to train a producer or director. Furthermore, the procedures at any station are constantly changing. Last week's rules may no longer apply -- and yesterday's limitations may have changed overnight. You should always ask for advice from your producer -- and follow it.
Speaking on Television

TALK TO ONE PERSON

Television is an intimate medium. Each viewer thinks that you are talking only to him. For an effective educational television presentation, you can capitalize on this sense of intimacy by always talking to an audience of one person.

DON'T PROJECT

When you are talking to one person, you naturally don't project as you would in a classroom or in an auditorium. Therefore, there is no need to project your voice when you are before the television camera. Keep your voice natural, intimate and personal.

WATCH YOUR LANGUAGE

While we are trying to educate our audience in your subject matter, we can also educate them in the correct use of the English language by your good example. However, this does not mean that you should speak in formal written English. A grammatically correct, orally precise, colloquial English is the language you should use on television.

DON'T WHISPER

Never whisper a cue or direction to another person who is on the program with you. You cannot hide anything from either the television camera or the microphone.
Types of Microphones

THE BOOM MIKE

The boom mike is a microphone attached to a long retractable arm suspended above you as you talk. Your movements are followed by the boom operator.

If you are using a boom mike in your program, never look up to see if the microphone has followed you and is in position to pick up your voice. Have faith that it is there.

THE BING MIKE

The bing mike is very similar to the boom except that its location is fixed. It will also be suspended above you on a long arm.

If you are using a bing mike in some part of your set, remember that its location is fixed and you cannot suddenly change your mind and cross to another part of the set and expect to be heard. The bing mike has its most frequent application in small instrumental or vocal groups.

THE LAVALIERE MIKE

The microphone that you will be using most is the lavaliere. This is a small, tubular-shaped microphone that hangs around your neck by a cord.

There are certain precautions to consider when you use the lavaliere microphone:

The mike cable must reach the microphone even though the latter is hanging around your neck. Hence, the mike cord becomes a real problem to contend with in the blocking of your program.

When you have your walk-through rehearsal in the studio before your program, do it with your microphone on. Then you will see if the audio man has left you enough cable to reach all parts of your set. Some action may have to be altered so that your cable does not become hopelessly entangled.
In the actual production of your educational television program, there are ten people who must know exactly what you are going to do just before you are going to do it. The studio crew is quite important to your program.

Although you will not be expected to know all of the intricate details of the jobs of each member of the studio crew, you should be generally familiar with their function in relation to their contribution to your program.
Chain of Command and Responsibility

What appears to be chaotic confusion in the television studio is really highly organized confusion.

Each crew member has his duties and responsibilities. Each makes his contribution to your program.

It must be remembered that the studio crew members are responsible only to the studio director.

There is no surer way of fouling things up than by circumventing your producer.

If you have a problem, or a suggestion to make, tell him about it—not the station director, cameramen or floor crew.
The director is in charge of the studio crew. Before your program, the director instructs the floor crew to set up the physical surroundings in which you will perform according to your floorplan.

From his position in the control room, he is in constant communication with each of the crew members through an intercom system, giving a continuous flow of instructions to them. From your script, he anticipates your moves and tries to keep the entire crew one step ahead of you.

The only visual contact the director has with the studio is through his television monitors. He calls for, views and selects pictures from each of the two studio cameras and the film camera.

The Technical Director

In the control room, immediately to the right of the director, sits the technical director. On commands from the director, the technical director punches the buttons or moves the levers which effect the change from one camera to the next. He is the man responsible for seeing that the picture being transmitted is of the highest quality that can be produced. The technical director also assumes the responsibility for assuring that slides and film are in the correct order for use on your program. In many cases the duties of the technical director are performed by the director.
The Audio Man

The last of the triumvirate in the control room is the audio engineer. After placing the microphones which you will use in the set, he controls the sound coming through seeing that it is neither too loud or too soft. He also plays all records or tape recordings that you will use on your program.

The Cameramen

The cameramen are perhaps the crew members you will see the most. However, there is more to their job than is seen during the program.

The cameramen are responsible for putting up the set for your program according to your floorplan and the instructions from the director.

During the performance, they receive instructions from the director and move and adjust their cameras for the best pictorial composition.
The Floor Manager

The other member of the floor crew is the floor manager. Generally, he is the director's right-hand man in the studio. He also adjusts the lights for each program and relays instructions between the producer and the director.

The Boom Man

On some of our programs, you may see a member of the floor crew that you have not seen before. He is the boom man and operates the microphone attached to the end of a long pole. However, it is only on rare occasions that we can call for the services of this additional member of the crew.
The Projectionist

In another part of the control area is the projectionist. He threads up any film which you may want to use on a special television projector and inserts your slides in the special television slide projector.

The Video Engineer

The video engineer is stationed in the master control room. He shades and adjusts each picture on the cameras before they are punched on the air by the technical director.
Master Control

The last crew member is found in the master control room. He does the final adjusting on the picture and sound coming from the studios. He has to be a highly trained, alert engineer because there are many delicate instruments that must be watched constantly.
Pages 165-170 are deleted due to copyright restrictions. They contained "So You're Going to Teach on Television" by Robert M. Diamond (The Instructor, October 1959)
REQUIREMENTS FOR EFFECTIVE TEACHING

It is impossible to define dogmatically the process of teaching by television. Success as a TV instructor would seem to be the product of a number of abilities and qualities rather than the result of any prescribed techniques.

What are some of the basic requirements for effective television teaching?

1. Effectiveness as an instructor in the conventional classroom situation. (Television does not make good instructors out of poor ones. Knowledge of and enthusiasm for subject is important and shows through on television).

2. An honest and sincere desire to take advantage of the use of TV.

3. A warmth or dynamic quality which enables the instructor to "get out of the box" and maintain contact with the student.

4. An imagination to adapt the course content to exploit the full potentials of television.

5. A willingness to plan and thoroughly prepare each television lesson in advance of its presentation.

6. Finally, a willingness to use the services of his coordinator, the TV facilities and the reactions of his students and colleagues in a constant effort to improve his instructional techniques.

Collectively, these abilities and qualities can help achieve the primary objective of any teaching situation, that of effective communication. There are, however, certain characteristics that make teaching by television different from conventional teaching.

TEACHING TO THE CAMERA

Teaching to a camera is admittedly a new experience. The thought of facing something as impersonal as a TV camera may not at first seem particularly stimulating nor at all academic. Some instructors have, in fact, been rather adamant in requesting the presence of a live audience. Although there are times, depending on the format of the course, when a studio audience can be used to good advantage, there are two basic reasons why the use of a studio audience is generally not adopted:

1. The presence of students in the studio results in a division of the instructor's attention. We have found
that when a studio audience has been used, the instructor invariably devotes an increasing amount of attention to the face-to-face group and less attention to the televiewing student. The resultant effect is to make passive observers of the televiewing students. In one sense they are looking through the window at a class in progress in which they are only indirectly involved. Seeing students present in the studio makes the televiewing student seem isolated and apart from the studio activity. When there are no students present in the studio the instructor teaches directly to the televiewing students through the eye of the camera.

2. The presence of a studio audience limits the extent to which television can be utilized and exploited as an instructional tool. One of television’s chief assets is the ability to provide each individual student with a front row seat. Thus, the student has an unobstructed view of all that takes place, even to the extent of inspecting in close-up the smallest detail. If the cameras, which are the eyes of the student, cannot achieve maximum mobility due to the physical interference of chairs and protruding heads and limbs, etc., television’s special contribution — the close-up — cannot be fully realized. Furthermore, the students in the studio may have their attention distracted by the television activities.

The adjustment that an instructor is called upon to make when he teaches to the camera rather than to students in front of him has not seemed particularly difficult. He automatically accepts the camera as a means to reach and communicate with his students. He soon learns to work without the cues which in a conventional classroom situation might come from "reading the students", i.e., noting their reactions and spontaneous responses. (Some instructors have solved this problem most effectively by using the camera operators as their immediate audience, as a sort of sounding board for making judgments on student reactions.)

The important thing to remember is that generally it does not seem advisable to mix the two teaching situations — teaching by television and conventional classroom teaching. Techniques that apply to one do not necessarily apply to the other. Bringing students into the studio may provide a more familiar environment for the instructor, but it can hamper the television presentation by interfering with television’s special capabilities and unique characteristics. Finally, and perhaps most important, the viewing student becomes a secondary consideration rather than the primary one.
TV can be an intimate medium. One of the factors contributing to this intimacy is eye contact.

An instructor, in teaching a conventional class, whether it is a small group meeting in a typical classroom or a large group assembled in a lecture hall, normally glances about the room looking from one student to another, and in so doing shares his attention with all of the students.

A television instructor, on the other hand, is looking straight into the eyes of every viewing student, regardless of the number of sections or the number of students in each section, when he is looking directly into the camera lens. A momentary look "off camera", a glance at the monitor, the other camera, or someone in the studio, may cause a breakdown in this direct contact with the student. This is not to infer that an instructor's eyes must become fixed on a camera. An occasional glance at notes, demonstration materials and equipment is natural and necessary. But it is important that the televiewing student be the constant recipient of the instructor's attention.

We have found that instructors are generally unaware of the importance of maintaining eye contact until they are given an opportunity to view a recording of their own lectures. (Arrangements for recording a sample portion of one of your TV lectures can be made through your production coordinator).

The following technique is suggested for maintaining eye contact: address the camera with the lighted tally light -- the red light on the face of the camera. Customarily, two or more cameras are used in televising your course, only one of which is on the air at a given time. The lighted tally light indicates which one. When the production coordinator in the control room switches from one camera to another, the tally light will go out on the "dead" camera and will light up on the "live" camera. A hand signal is generally given by the camera operator indicating a change to the other camera.

**PACING**

The rate at which information is given and visual elements are presented is referred to as "pacing." Certain factors, both psychological and mechanical, influence the rate, or pace, which an instructor employs when presenting his lecture on television. In televised instruction, unlike conventional classroom instruction, the teacher cannot see his students and, consequently, he cannot be certain whether the information is being given too rapidly or too slowly.

Here are several suggested techniques an instructor might use to help him pace his presentation in such a way as to provide sufficient time for students to follow the course of the lecture, to
react to visual and illustrative materials, and to make appropriate responses according to their own individual satisfaction and need:

1. Anticipate the difficult and complex elements of the lecture, and make certain these points are given special emphasis and adequate explanation.

2. Anticipate questions which might arise from the presentation and try to answer them at appropriate times during the presentation.

3. Build into the lecture a varied pattern of repetition so as to present information again but in a different, yet stimulating, way.

Related to this problem of pacing is the purely mechanical one of following the progress of the instructor as he presents his material. It is difficult for the cameras to follow rapid, irregular and unexpected movements. It is particularly difficult and awkward to go from one close-up to another, as time is needed to set and re-adjust the cameras for the next shot.

During the telecast the production coordinator will be able to make smooth and meaningful transitions and anticipate gross movements if the instructor alerts him by employing verbal cues as the need arises. (For example: "In a moment I want to show you a graph illustrating this shift in population, but in the meantime let's consider the reasons for this change.")

A rather general suggestion is made about pacing: the television instructor must be careful to keep his rate of development within the technical limits of the medium and at a rate consistent with good teaching and learning.

**WHEN YOU ARE "ON CAMERA"**

Be natural. You are not appearing as an actor or an actress but as an interesting person who has an interesting communication. That is the only role you are expected to play. With exceptions, depending on the format, it is better to have one person present the entire series, or at least introduce and close each program. You may have guests appear on the program with you, or you may introduce a guest to present the entire show.

**ABOUT YOU IN PARTICULAR**

a. Your appearance is important. Do watch your posture! The audience may not comment about your posture if it is good, but viewers will certainly notice if it is bad.
1. **Watch Your Stance!**

Standing posture should be comfortable, but at all times pleasing to the audience. Performers should avoid slouching, slumping or leaning on furniture. Stand so that movement can come easily and naturally in any direction.

2. **When Not Speaking: Be Sure to Listen!**

Effective listening while on camera must be an active process. It requires more than just placing oneself within "ear shot." Profitable listening requires that the listener recognize the ideas presented, evaluate and organize them, discover relationships and select from what he hears those worth accepting or challenging. The natural, thoughtful critical listener projects through facial expressions and bodily movements his interest in what is being said. The animated, alert listener on the screen stimulates interest on the part of those in the viewing audience.

**B. The television cameras and microphones work in cooperation with you and can only report what is presented to them. Your every movement is important. Some people have peculiar mannerisms of which they are unaware. These may be distracting enough to cause the audience to focus their attention on these rather than on what is being presented.** If this is the case, the performer will be made aware of them and effort should be put forth to overcome them. Try to avoid meaningless gestures and unnecessary movements during the program. They "steal the show" from what you are saying or doing.

3. **How to Move**

Movement should be directed, smooth, and easy. Movement should be planned in rehearsal and followed on the air. Any sudden spontaneous, or un rehearsed movement may take you out of the picture frame, to the confusion of the audience and the consternation of your director.

4. **When to Move**

The performer may move whenever there is a need to do so, but movement for the mere sake of movement should be avoided. Bobbing and weaving are very difficult to capture in close-up shots.

5. **Cue for Movement**

The crew needs cues for movement from you on "ad lib" or un rehearsed shows. They must sense, from what you say or your action, the direction you plan to go and something of the extent of the action anticipated. The best way to do this is verbally.
C. You, the performer, are the most important part of the presentation. All props, attire, and visuals are for your support in creating a real and natural presentation. They must, in most cases, remain secondary to you.

A special note to the ladies. Do wear a tailored dress or blouse, free from frills and tricky collars. The audience wants to give its attention to you and not to the dress you are wearing. The same goes for hats. If you feel comfortable and at ease in your hat, wear it if you choose. Do wear a dress you have worn before and that you know is becoming. Then concentrate upon being your own natural, charming self. Dress and make-up are very important to your presentation.

1. Dress and Make-up

    a. Men should wear medium shades. Shirts should be pastel if contrasted with a dark suit. Stay within middle range of contrasts and avoid extremes in contrasts.

    b. Women should wear pastels and medium shades.

    c. Plain colors in tans, light blues, and grays are preferable.

    d. Tweeds, coarse herringbones, plaids, and simple broad patterns are generally accepted. Patterns in tones of a single color are usually effective.

    e. Sequined materials, satin, patent leather and shiny accessories should be avoided.

    f. Avoid jewelry that sparkles under light. Rhinestones and polished silver and gold are bad for television cameras. Pearls and dull-finished metals are better. Remember, a little jewelry goes a long way -- keep it simple and uncluttered.

    g. Eyeglasses are a natural thing. If you are accustomed to wearing them, by all means do so.

"RUN-DOWN" SHEET

A successful TV presentation is very definitely affected by the knowledge your production coordinator has about each lesson. To provide your coordinator with this information you should give him an outline of the day's lesson on which you indicate your broad movements ("at easel", "at blackboard", etc.) and precisely in what order and at what points in the lecture the various visual materials will be needed. A suggested alternative is to have your production coordinator write in his own cues when he meets with
you in conference or, as a last resort, during the "set-up" period prior to the TV presentation. A "run-down" sheet submitted to your production coordinator is definitely a contribution to a smoother and more successful presentation from the standpoint of the instructor, the production staff, and the viewing student.

A sample "run-down" sheet to help you prepare your own outline is app

PREPARATION OF MATERIALS

For the preparation of visual materials assistance may be obtained from the TV Graphics Section. You are encouraged to use this facility. Arrangements can be made through your production coordinator. However, the following are suggestions for consideration in preparing your own materials:

1. Keep your visuals simple. Don't clutter them up so that the significance of the message is lost among unimportant and perhaps distracting details.

2. Use an 11" by 14" card (our standard) for base cards and for mounting photographs and graphics. Supplies may be purchased by your department or, in cases where a limited supply is needed, secured from our graphics section.

3. Use the proper aspect ratio (proportions), i.e., visuals should be approximately 3 units high by 4 units wide to fit camera framing and viewing screen.

4. Use the horizontal rather than the vertical format in the selection and design of visuals.

5. In the preparation of charts, allow a 2" margin around the edges, to insure proper framing of the visual materials.

6. Select medium to dark grey, medium to dark blue, and black for use as base card colors. Charts, diagrams, etc. on white or very light backgrounds are undesirable.

7. Use white on black to superimpose simple diagrams or outlines and printed captions over the live picture as the material is presented. The superimposition will be discussed in detail in a later section.

8. Choose a mat finish rather than a glossy finish. This is true in the selection of base cards and is especially applicable in the selection of photographs where reflections from studio lights may present a problem. If it is necessary to use glossy photographic prints, they must be mounted on a stiff card and treated with dulling spray.
9. Remember, for televising typed material a recommended format size is 2-1/2" by 2" or about 8 lines of type about 2-1/2" long.

10. When you use graphics or diagrams, the letters or figures should preferably be not less than 1/10 of the height of the area to be covered by the camera. (1/15 of the height of the frame is the absolute minimum). For instance, if the camera is to cover an area 10" high the letters should preferably be not less than one inch high. You can check legibility by reading the material from a distance equal to twelve times the width of the area to be covered by the camera. (For example, if the camera is to cover a visual 12" wide the printing on it should be clearly readable from a distance of twelve feet).

USE OF THE BLACKBOARD

1. Make blackboard writing legible and orderly. Poor writing looks even worse when framed in the television screen.

2. Use only one blackboard panel at a time. This will approximate the 3 to 4 aspect ratio.

3. An alternative is to write smaller and imagine a blackboard panel divided into 4 quarters or 4 screen widths.

4. First use the board surfaces to right and left of your normal standing position rather than the area directly behind you.

5. If possible, erase the blackboard when the topic to which the written material applies is completed, or erase it at a convenient place in the flow of presentation, rather than when additional space is needed. (This eliminates distraction of board material in background when the camera is on close-up of instructor).

6. If working at one board panel and you find it necessary to refer to material on another panel, move to that panel, point out the item, pause long enough to permit camera coverage, then proceed with presentation.

7. Upon completion of written material at board, be it one word or an involved statement or formula, step to the side and do not block blackboard work by standing in front of it.

8. Stand close to the board material until you're finished with it. Then take your normal position at the desk or lectern and continue with the presentation. If you keep glancing back at the board after you have left it, one of
two things result: (a) for the camera to pick up both you and the board makes the board work out of focus and too small to be readable, or (b) the viewer's attention is divided between you and something that you are apparently looking at beyond the range of the camera.

DISPLAYING VISUAL MATERIALS

1. Properly mounted clippings, pictures, and prepared graphics can be attached to cork-board easels or suspended from rings of flip-card stands.

2. Diagrams, pictures, etc. in periodicals and books which cannot be cut out and prepared in the recommended way may be placed on a special easel provided for this purpose. It should be noted, however, that this alternative technique creates some problems which may result in inferior quality reproduction. Suggestion: Buy a second book.

3. When cards, pictures, and three dimensional objects are hand-held for display, it is necessary to hold the item steady and in a static position long enough to permit proper camera coverage. An object may be slowly turned in the hands so that all sides or parts can be viewed.

4. If hand-held photographs and certain three dimensional objects present light reflection problems as observed in your studio monitor, tilt them slightly forward at the top in the direction of the camera to eliminate reflections.

5. When it is necessary for you to re-examine a hand-held object which is being televised in a close-up, look at the studio monitor for additional information and detail instead of pulling the object away from the cameras for your own inspection. This eliminates the distraction created by movements that seem grossly exaggerated because of the close-up.

6. When using a visual there is a tendency to direct your remarks toward the visual rather than the camera and consequently you lose contact with the students. Talk to the camera and not to the visual.

7. When making reference to specific parts of a visual, the use of a pointer rather than the hand is suggested (not only for aesthetic reasons but because there is less likelihood of blocking the camera's view).
VOICE PICK-UP

A lavalier or chest microphone is used almost exclusively if sound pick-up (panels and interviews are possible exceptions). With the use of the chest microphone you need not be concerned about voice level. Volume is regulated in the control room.

1. Unlike speaking in a typical classroom, it is not necessary to project your voice in order to be heard. Speak in a normal, conversational way.

2. You are cautioned not to lean on the lectern or desk. If you do, the chest microphone hangs away from your chest, and the sound is muffled.

3. In a studio environment one should have respect for the microphone. Since there is always the possibility of its being "hot", a good rule to follow is: be careful what you say when in range of a like. Strict observance may save you needless embarrassment!

STUDIO MONITORS

The most common single fault of TV instructors is that of "monitor watching". There are 2 types: (1) the instructor who takes frequent side glances in the direction of the monitor, and (2) the instructor who actually teaches to the monitor. A studio monitor seems to have a special attraction for the inexperienced instructor. Monitor watching, however, is not solely the province of the novice. Even the veteran TV instructor through a habit reinforced over a considerable period of time may be a chronic monitor watcher.

Why all this emphasis on a seemingly incidental element of TV technique? Because the important quality of intimacy is lost when the instructor does not teach to the camera. Address the camera lens, the 6 o'clock lens on our cameras.

Basically, the studio monitor serves three purposes:

1. It enables you to determine whether or not your viewers are seeing well what you want them to see.

2. It enables you to read or see in detail a visual picked up by the camera in close-up. If you can read it on the monitor, your students will be able to read it.

3. It serves also as a check point when displaying visuals that may be reflecting studio lights into the camera lens. A slight shift of the object can remedy this problem.
A. Try to disregard the ordinary hustle and bustle in the television studio. The studio crew will be busy getting the settings ready, and adjusting the lights, camera and microphones. Just remember that it is their responsibility to get the program on the air and if they're swinging from the rafters, it is probably for a good reason. It usually takes 10 to 20 people to put your program on the air. All of their efforts are aimed at helping you do the best job possible. You will not have to consider the technical aspects. Concentrate upon your particular presentation.

B. Production treatment for the program begins with the rehearsals. A close working agreement with the performer, producer, director and floor manager is a must. The producer is the developer-organizer of the show. The director services the show and when the show goes into production, the director assumes the responsibility for the most effective presentation of the subject matter and will give all the directions. Floor Manager is in charge of studio floor activity and relays all communications from the director. Performers should depend on the Floor Manager for all cues and answers to questions that may arise. Performers will have opportunity to meet the Floor Manager before the program goes into rehearsal.

1. Cues

Do not acknowledge, noticeably, any cue given in the course of the program. The cue will be sustained long enough to give an opportunity to see it. Carry out directions given by the Floor Manager in a natural, easy manner. You should always wait for a cue from the Floor Manager before beginning any action.

a. Stand-by—this is a warning that a cue is about to be given. The is raised and held poised.

b. Act—the action cue is given by bringing the arm down and pointing directly with the index finger at the person waiting for the cue.

c. Speed-up— if the action is running behind schedule the director will tell the Floor Manager to speed up the talent. The cue to the talent consists moving the index finger in a circular, clockwise direction.

d. Slow-down—the slow down cue is a stretching gesture, in which the two hands are moved away from each other with the fingers held as if they were stretching something.

e. On the nose—if the action ia running on schedule the players are so informed by the Floor Manager pointing the index finger to the tip of the nose.
f. **Tighten up**—if performers are working too far apart for camera composition, the signal to pull them closer together is made by raising the hands vertically, palms facing, and moving hands closer.

g. **Open up**—if the performers are bunched too close, or if someone is covering action, the opposite gesture is used; the palms are turned outward and the hands are moved apart.

h. **Upstage or downstage**—if the performers are working too near, or too far from the camera, the two hands are used in a "go-away" or a "come hither" gesture.

i. **Stay on camera**—often a performer forgets to be camera-wise and turns too far away from the camera. The cue is to bring the hands up as if they held the talent's head and to give it a turn in the proper direction. This may be immediately followed by pointing to the camera on the air.

j. **Modeling hand props and visuals**—in showing visuals, the talent showing them may need to be cued to give best position for camera shot. The Floor Manager merely pantomimes the moving, tipping or whatever direction is given.

k. **Time cues**— timing cues will be given by the Floor Manager either by cards showing number of minutes, or seconds, or by holding up fingers to indicate the minutes and seconds. All timing cues will be worked out during the rehearsals.

l. **O.K.**—when everything is going as planned, the common gesture of the index finger and thumb in a circle is used.

m. **Cut or stop talking**—if the show is running behind schedule and some part has to be edited, the cue is executed by cutting-the-throat movement of the finger of hand across the neck.

2. **Voice and Diction**

   a. **Voice**—the performer's normal conversational voice, in most cases, will be adequate.

   b. **Vocabulary**—a simple vocabulary which will enable the performer to express himself clearly and concisely should be used. He should economize in words and come directly to the point. When you must use a technical or obscure word, explain or illustrate its meaning for your audience.

   c. **Questions**—all questions should be direct. Questions should not be prefaced with such statements as, "I would like to ask," or "Would you tell me," etc. Complex questions should not be asked.
d. Errors-Correct errors naturally. If a mistake or an accident happens during the show, someone in the audience will notice it. Do not ignore it, but do not be overly apologetic.

e. Habitual speech patterns-some people have developed speech patterns such as a rising inflection at the end of each thought, over-emphasizing the same words, as the first or last word in each thought, etc. These patterns tend toward monotony. If they are distracting they should be corrected. If the performer has trouble with a dry throat, fuzzy tones, or similar irregularity, he should correct it naturally by clearing his throat, taking a drink of water, or any other natural way.

3. Working with the Camera

a. Direct contact-tally lights will appear on the front of the camera which is on the air. When speaking directly to the viewers, look straight into the lens of the camera.

b. How to switch camera-when the red lights (tally lights) go out - an indication that the director has switched to another camera - shift your eye contact to the other camera in a natural way. The Floor Manager will give you signals indicating the "hot" or air camera.

c. How to include camera when talking with a group-if a member of a group, the performer's eye contact will be directed toward the members in the group with an occasional direct contact with the camera to make the viewers feel that they are included.
Attire, make-up, use of eyes, elimination of disturbing mannerisms, giving cues, and scores of other details involved in effective TV presentation can be learned from outside sources such as books, observation and direct teaching; but the choice of subject matter for each telecast must be primarily the responsibility of the instructor. He and he alone is in a position to determine what must be presented, what can or should be de-emphasized, the exact relationship of each part to the whole, et al. In other words he is the person who must preserve the integrity of the course.

An instructor may plan a presentation, however, which, although logical, is dull television. The problem lies in determining what is both good teaching and good television. In the hope of being helpful the following tentative suggestions are made.

1. **Choice of Areas to be Covered in Telecasts**

   A. Areas in which the specific can precede the general. For instance, when talking about the importance of physical, mental and emotional health as related to proper physical education training, rather than showing a film of many children at diversified play, select a film of a few children on a Jungle Jim taken from different angles.

   B. (Closely related to A) Areas in which inductive teaching is more desirable than deductive. Of course, with certain subject matter this is not practical.

   C. Areas in which the concrete can precede the abstract. For instance an instructor was going to consider the fundamental tenets of Buddhism. He could very well have begun "logically" by telling when Buddha was born. Instead, he found a bust of Buddha; it was placed on a revolving pedestal and lighted in limbo; some of the more important tenets were read while the viewer was looking at the revolving figure.
In some more difficult areas, the ingenious instructor may hit upon a "device" which will help to focus attention. A music teacher, when wishing to deal with "Keys to Success" in a certain activity, found a most impressive key (plastic from the dime store!). Mounted on velvet and lighted properly it became an effective "aid."

D. Areas which will lend themselves to problem presentation. One of the limitations of television is that it tends to encourage passive attention rather than active. Understanding this, the language instructor very smartly fades to gray while the viewer responds.

E. Areas in which there can be pace change in the presentation. As a matter of fact, every telecast lends itself to pace change; but deliberate planning, which involves segments of illustrative detail or re-cap material, will make this element more effective.

2. Fundamental Concepts

A. The goal in teaching and not performance; good teaching, however, involves some showmanship.

B. Although the focus of attention should be on educational objectives rather than on audience rating, many times the two are not incompatible.

C. Lesson plans should be based on sound principles of communication; stiff unimaginative plans sometimes get in the way of showing the viewer "what he wants to see when he wants to see it." (Credit to Mr. Bretz)

D. There is a definite limit to the amount which can be presented in a single telecast. That limit should be realistically accepted.

E. "Show" rather than "talk about," provided to do so will not down-grade the presentation.
3.

Guides to Procedural Detail

A. Be on the alert for a visually arresting segment for the opening, and possibly the close, of each telescast. Sometimes the same element can be used for both. Of course, this must be in sharp focus with the lesson for the day.

B. Plan a unit, relatively short (a minute or so), with which to conclude. The instructor will go into this on cue, and since it will have been "back-timed" a smooth ending is assured.

C. The instructor and/or the producer should provide a clear script. The purpose of scripting is to convey to the director, who calls the shots, the intent of the instructor and the producer.

D. Employ movement whenever sensible to do so.

4.

Manner of Presentation

A. Sincere

B. Direct and intimate as though talking to one person

C. Energetic

D. Refuse to permit enthusiasm for the subject to be dampened by the newness of the situation. Learn TV techniques as rapidly as possible, but remember that a few "fluffs" are infinitely better than a stiff unnatural manner.

E. Maintain at all times a strong sense of communication.