The East Cleveland "Enriched and Extended School Year" program, funded by Title III of the 1965 Elementary Education Act, is an attempt to organize the educational activities of a school around the needs and learning patterns of its pupils. The major premise of the program states that children possess different rates and styles of learning, and respond to instruction more in accordance to its interest value than to its intrinsic cognitive value. The objectives of the program are to: (1) motivate the child to learn; (2) assist the pupil with his identification with his school; (3) change his patterns of learning; and (4) achieve one full year of academic achievement for each year of chronological development. Two major changes in the school process have been developed to attain those objectives. Firstly, six one-week segments of enriching school educational activities were interspersed throughout the year. These activities consisted of five days in instruction conducted by and in local cultural institutions. The instructional programs were highly ego-involving, requiring considerable active participation; included experiences ordinarily not capable of duplication on the school level; and were also designed to be highly educational. The second change was a revision of the traditional school calendar. [Parts of this document are not clearly legible due to the print quality of the original. ] (Author/JM)
"ENRICHED AND EXTENDED SCHOOL YEAR"
EAST CLEVELAND CITY SCHOOLS

A REPORT . . AN EXPERIMENTAL PROJECT
FUNDED BY
TITLE III E.S.E.A.

OHIO DEPARTMENT OF EDUCATION
1971 - 1972

SUPERINTENDENT OF EAST CLEVELAND SCHOOLS
Leonard Visci

PROGRAM DIRECTOR
Edward F. Armon

EDITORS
Edward F. Armon
Elizabeth Hyde, Ph.D.
Bertram Masia, Ph.D.
Lawrence Perney, Ph.D.
On behalf of the 300 students and their parents from Chambers School who participated in the "Enriched and Extended School Year" the following persons made this experience possible:

CURRICULUM CONSULTANTS

Dr. Raymond Balester, Case Western Reserve University
Dr. Bertram Lasta, Case Western Reserve University
Dr. Lawrence Perney, East Cleveland City Schools

INSTRUCTIONAL PERSONNEL

John J. Whelan, Principal
Clayton Burroughs
Joan Vatko
Rosemary Giaramita
Mary Liggins
Margaret Lewis
Catherine Hagedorn
JoAnne McQueeney
LeVert Marshall
Mary O'Conner
Linda Polito
Susan Silvestri
Carol Weber
William Gordon

CLEVELAND MUSEUM OF ART

James A. Birch and Staff

CLEVELAND MUSIC SCHOOL SETTLEMENT

Howard Whittaker and Staff

CLEVELAND HEALTH MUSEUM AND EDUCATION CENTER

Lowell Bernard
Roberta Jones and Staff

NATURAL HISTORY MUSEUM

Mary Flahive and Staff

KARAMU HOUSE

Louise McGuire and Staff

RED RAIDER CAMP

R. Fox Smith and Staff
# TABLE OF CONTENTS

## INTRODUCTION
- Description and Summary .......................... i

## CHAPTER I
- East Cleveland: The Social Setting ............. 1

## CHAPTER II
- The Extended School Year Program ............... 5

## CHAPTER III
- Effects on Students ................................ 45

## CHAPTER IV
- Effects on Teachers ............................... 90

## CHAPTER V
- Effects on Parents ................................ 123
## LISTING OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Distributions of Length of Teaching Careers of Teaching in the Extended School Year Program</td>
<td>30</td>
</tr>
<tr>
<td>II</td>
<td>Number and Per Cent of Total Student Population in the Extended School Year Program in Agreement with the Questionnaire Statements</td>
<td>47</td>
</tr>
<tr>
<td>III</td>
<td>Per Cent of Students at Each Grade Level in Agreement With the Questionnaire Statements</td>
<td>48</td>
</tr>
<tr>
<td>IV</td>
<td>Absent-from-School Percentage Rates for Extended School Year Populations and Other East Cleveland Elementary School Populations</td>
<td>49</td>
</tr>
<tr>
<td>V</td>
<td>Chi-square Values by Grade Level and Rating for Social and Emotional Adjustment</td>
<td>53</td>
</tr>
<tr>
<td>VI</td>
<td>Per Cent Frequency of Changes in Ratings of Grade 6 Teachers on Student Emotional Adjustment</td>
<td>54</td>
</tr>
<tr>
<td>VII</td>
<td>Per Cent Frequency of Changes in Ratings of Grades 1 and 2 Teachers on Student Tendency Toward Aggressive Behavior; Beginning-of-year vs. End-of-year</td>
<td>56</td>
</tr>
<tr>
<td>VIII</td>
<td>Per Cent Frequency of Changes in Ratings of Grade 3 Teachers on Student Extroversion-Introversion; Beginning-of-year vs. End-of-year</td>
<td>57</td>
</tr>
<tr>
<td>IX</td>
<td>Per Cent Frequency of Changes in Ratings of Grade 3 Teachers on Emotional Security; Beginning-of-year vs. End-of-year</td>
<td>58</td>
</tr>
<tr>
<td>X</td>
<td>Per Cent of Changes in Ratings of Grades 3 and 5 Teachers on Motor Control and Stability; Beginning-of-year vs. End-of-year</td>
<td>58</td>
</tr>
<tr>
<td>XI</td>
<td>Per Cent Frequency of Changes in Ratings of Grades 3 and 4 Teachers on Impulsiveness; Beginning-of-year vs. End-of-year</td>
<td>59</td>
</tr>
<tr>
<td>XII</td>
<td>Per Cent Frequency of Changes in Ratings of Grade 1 Teachers on School Achievement; Beginning-of-year vs. End-of-year</td>
<td>60</td>
</tr>
<tr>
<td>Chapter</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>XIII</td>
<td>Per Cent Frequency of Changes in Ratings of Grades 3, 4 and 6 Teachers on School Conduct; Beginning-of-year vs. End-of-year</td>
<td>61</td>
</tr>
<tr>
<td>XIV</td>
<td>Mid-Year Parent Reports on Changes in Behavior of Their Children Observed at Home (Per cent)</td>
<td>68</td>
</tr>
<tr>
<td>XV</td>
<td>Parent Responses to Statements Concerning Their Children and School (Per cent)</td>
<td>69</td>
</tr>
<tr>
<td>XVI</td>
<td>Stanford Achievement Battery Median Scores For The East Cleveland Pupils Fall 1970 Compared To Expected Norms</td>
<td>75</td>
</tr>
<tr>
<td>XVII</td>
<td>Stanford Achievement Test Mean Scores For Various Groups Administered In May, 1972, For Grade Two</td>
<td>77</td>
</tr>
<tr>
<td>XVIII</td>
<td>Stanford Achievement Test Mean Scores For Various Groups For Grade Three Administered In May, 1972</td>
<td>79</td>
</tr>
<tr>
<td>XIX</td>
<td>Stanford Achievement Test Mean Scores For Various Groups Of Fourth Grade Students Administered In May, 1972</td>
<td>80</td>
</tr>
<tr>
<td>XX</td>
<td>Stanford Achievement Test Mean Scores For Various Groups Of Fifth Grade Students Administered In May, 1972</td>
<td>82</td>
</tr>
<tr>
<td>XXI</td>
<td>Stanford Achievement Test Mean Scores For Various Groups Of Sixth Grade Students Administered May, 1972</td>
<td>84</td>
</tr>
<tr>
<td>XXII</td>
<td>Stanford Achievement Test Results With Battery Median Means For East Cleveland Compared With Project Pupils On Their Pre And Post Test -- 1971-72 School Year</td>
<td>89</td>
</tr>
<tr>
<td>XXIII</td>
<td>Program Teacher Absence (by Type) For Entire Extended School Year</td>
<td>90</td>
</tr>
<tr>
<td>XXIV</td>
<td>Frequency Distribution of Days of Sick Leave for Program Teachers for the Entire Extended School Year</td>
<td>91</td>
</tr>
<tr>
<td>XXV</td>
<td>1971-72 Per Teacher Absence Rate by Elementary School</td>
<td>92</td>
</tr>
<tr>
<td>XXVI</td>
<td>Summary Statistics on Differences Between September, 1971 and July, 1972 Administrations of the Cattell Sixteen Personality Factor Test</td>
<td>93</td>
</tr>
<tr>
<td>XXVII</td>
<td>Summary Statistics of Beginning - and End-of-Year Teacher Scores on the Kerlinger Teacher Attitude Scale</td>
<td>103</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
<td>Page</td>
</tr>
<tr>
<td>---------</td>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>XVI</td>
<td>Summary of Teacher Responses to the Question of Effects of Processes Upon Themselves</td>
<td>104</td>
</tr>
<tr>
<td>XVIII</td>
<td>Summary of Teacher Responses to the Question of Effects of Residencies Upon Themselves</td>
<td>107</td>
</tr>
<tr>
<td>XXXI</td>
<td>Summary Statistics for Changes in Instructional Activities Occurring Simultaneously in Program Classrooms</td>
<td>111</td>
</tr>
<tr>
<td>XXXII</td>
<td>Summary Statistics for Change in Student Initiated Activities in Program Classrooms</td>
<td>112</td>
</tr>
<tr>
<td>XXXIII</td>
<td>Summary Statistics for Changes in Instructional Resources Observed in Program Classrooms</td>
<td>113</td>
</tr>
<tr>
<td>XXXIV</td>
<td>Summary Statistics for Changes in Number of Students With Whom Teacher Becomes Actively Involved</td>
<td>114</td>
</tr>
<tr>
<td>XXXV</td>
<td>Parent Responses to Statements Concerning Educational Matters</td>
<td>125</td>
</tr>
<tr>
<td>XXXVI</td>
<td>Parent Attendance at Museum Open Houses</td>
<td>128</td>
</tr>
<tr>
<td>XXXVII</td>
<td>Proportion of Parents Interviewed Reporting Visiting Their Children During Residency</td>
<td>129</td>
</tr>
<tr>
<td>XXXVIII</td>
<td>Proportion of Parent and Child Post-Residence Voluntary Visits to Museums and Karamu House</td>
<td>130</td>
</tr>
</tbody>
</table>
INTRODUCTION AND SUMMARY

DESCRIPTION OF THE PROGRAM

The East Cleveland "Enriched and Extended School Year" program is an attempt to organize the educational activities of a school around the needs and learning patterns of its pupils. The major premise of the program states that children possess different rates and styles of learning and respond to instruction more in accordance to its interest value than to its intrinsic cognitive value. The objectives of the program aim to:

1. Motivate the child to learn.
2. Assist the pupil with his identification with his school.
3. Change his patterns of learning.
4. Achieve one full year of academic achievement for each year of chronological development.

Two major changes in the school process have been developed to attain these objectives. First, six, one week segments of enriching school educational activities were interspersed throughout the year. These activities consisted of five days of instruction conducted by and in local cultural institutions. These included The Cleveland Museum of Art, Cleveland Museum of Natural History, Cleveland Health Museum, overnight camping, Karamu House, and the Cleveland Music School Settlement. The instructional programs were highly ego-involving, required considerable active participation, included experiences ordinarily not capable of duplication on the school level, and were also designed to be highly educational.

The second change was a revision of the traditional school
calendar. The school year was defined as beginning in September and concluding at the end of July. This calendar eliminated the long summer vacation in which many of the learning habits and patterns established during the school year are seriously regressed or are lost. The actual amount of school time was not, however, significantly increased. This was effective by including five, one week vacations interspersed throughout the year. In effect, a pupil’s program could be viewed as consisting of six similar segments with four weeks of traditional programming, one week’s instruction in residence at one of the community’s cultural institutions, and one week’s vacation. The total number of days attended by the pupils was 195. Teachers, on the other hand, utilized the pupils’ vacation periods for in-service education inquiring into their own educational needs, curricular planning with the staffs from the cultural institutions, and planning for in-school instructional programs.

EFFECTS ON TEACHERS

As a result of participation in the East Cleveland Enriched and Extended School Year Program, teachers’ attitudes, as measured both by psychometric instruments and by teachers’ self report, have undergone considerable change in the eleven months of the program’s duration. Pre and post program testing reveals that at the close of the first year of the program, teachers displayed significantly more warmth and tenderness (p<.01), more imagination (p<.01), more conscientiousness and willingness to assume greater responsibilities
(p<.01), and, in general, greater emotional stability (p<.01). As a result of the enhanced socio-cultural inputs inherent in the program, these teachers have shifted from the pragmatic to one that is concerned with abstracts and expanded interests (p<.001). At the close of the first year of the program, these teachers were significantly more driven intellectually (p<.01), more worldly and penetrating (p<.001), more self-disciplined and socially precise (p<.001), and indeed more self-sufficient (p<.001). In short, one finds a picture of individuals who have become more curious, more sophisticated, and more self-directed and individuals who feel emotionally comfortable with this new, enriched orientation.

These attitudinal changes are further reflected in various changes in behaviors displayed by the participating teachers. Teacher absenteeism averaged only three days per teacher for the eleven month academic period of study. This absence rate was considerably below that displayed by teachers in all other East Cleveland elementary schools. Pre-post classroom behavioral observations further revealed that at the close of the first year of the program the participating teachers had significantly more instructional activities occurring simultaneously in their classrooms (p<.01) and tended to be interested more with a greater number of students and to utilize more, varied instructional resources. In terms of instructional resources, the teachers themselves stated that the program had benefitted them: (1) by helping them discover novel ways of using existing materials, (2) by supplying them with new materials and techniques acquired
through the residencies at the various cultural institutions; and (3) by the freedom and richness afforded by extending "instructional resources" beyond the confines of the regular classroom to include resources naturally available in the community.

Teacher self-reports indicate that the various facts of the program proved beneficial and for a variety of reasons. The scheduled vacation periods allowed the teachers an opportunity to plan and think about professional matters, to consult with other professionals, and to attend various professional meetings. These vacation periods also afforded teachers time to work intensively with students in need of individualized remediation and/or time simply "to relax, reflect, and catch one's breath."

The residencies at the cooperating cultural institutions similarly were deemed beneficial in a number of ways. These residencies offered the teachers new knowledge about particular fields and disciplines - knowledge which they could adopt back in their regular classrooms. The residencies afforded them the time and the freedom to observe in a new light various students in their classes. Many teachers commented that the residencies afforded them a whole new orientation to teacher - i.e. teachers talked about being more willing to let students find out things for themselves, being less controlling, and developing more patience. All teachers commented that the residencies had resulted in an enhanced sense of sharing and comradeship with their fellow teachers and with their students.
As discussed in Chapter V of the body of this report, the Enriched and Extended School Year Program was not designed to effect or "cause" changes in the participating students' parents. Rather, what this section of the report deals with is the effects the parents had on the program's success as well as various attitudinal changes occurring among the parents which concurred with (but were not necessarily "caused" by) developments in the program.

At the onset, parents in general were certainly willing enough to consent to enroll their children in this program, but there were hesitations and some very normal skepticism — e.g. "Sounds like a good idea, but can it really work?" At the completion of the first year of the program, this skepticism had changed to outright enthusiasm, overwhelming support, and questions of "When will the program be expanded to include more children in more East Cleveland schools?"

Parents' attitudes towards the program and the school are extremely favorable. On an anonymous parent questionnaire, 100% of the respondents indicated that they thought the teaching staff was interested in their students, 100% felt the staff was friendly when parents visited the school, and 99% felt that if their child acted up in school, the school would treat him (her) fairly. This positive parent attitude toward the program is further reflected in parent behaviors. That is, at a series of Open Houses held on evenings at the various cooperating cultural institutions, approximately 60% of the parents were in attendance. In addition, about
25% of the parents quite independently and voluntarily visit these institutions with their children on evenings and on weekends. The overwhelming majority of parents stated that they attend these institutions because their child (children) talk so enthusiastically about their experiences at the institutions that the parents "just had to see for themselves". Indeed, one of the benefits of the program most frequently cited by the overwhelming majority of parents was that their children came home from school much more verbal, much more excited and enthusiastic, and bursting to talk about what had happened at the institution that day.

**EFFECTS ON STUDENTS**

Last, but by no means least, are the effects which the program has had on the participating students. These effects are considerable and, consequently, will be discussed at some length.

As reflected by a number of different measures, the students' attitudes toward the program were overwhelmingly favorable. On a ten-item student questionnaire concerning students' attitudes and "liking" for school during the program year as compared with previous years; an average of 76% of the project students were extremely positive towards school. Noteworthy is the fact that on two items - "things done in school are more fun this year" and "I am learning more in school this year than last year" - the percentage of students in agreement jumped to approximately 90%. Apparently, the Enriched and Extended School Year Program was having its greatest effects on the enjoyment and amount of learning the students experienced during the project year.
Changes in the project students' attitudes toward school are also reflected in their parents' reports of the changes in behavior they observe in their children at home. The three most recently mentioned categories of behavior changed cited by the parents were: "increase in talking in general" (mentioned by 84% of the parents), "talks with enthusiasm about what he (she) has learned in the residencies" (89% of the parents), and "greater interest in school and more reluctant to stay home" (78% of the parents). The participating students' reluctance to miss school is further verified by the finding that their absenteeism was the lowest of all the East Cleveland elementary students. Considering that the participants' schooling extended through July, this extremely low student absence rate is rather remarkable.

Teachers in the project further report that they have observed various cognitive, attitudinal, and socio-emotional changes occurring in their students as a result of their participation in the program. As did the parents, teachers too report that the students seem much more verbal, more eager, and more enthusiastic about school. Teachers commented that the students' language usage was in fact enhanced, that they were more knowledgeable about topics and areas which they were exposed to at the various cultural institutions, and that they were assuming more responsibility and initiative in following through on particular interests gleaned through the institution residencies. The teachers felt that the students had grown emotionally from the experience, in that they were judged to be less dependent and more self-directed, more adaptable in new situations, and generally more
comfortable with adults and peers. Pre-post testing indicated that the teachers rate their students as having made the greatest gains in the area of improved school conduct.

In addition to these various attitudinal and behavioral changes, standardized achievement testing revealed that the project students made significant gains in terms of academic achievement. This is not to say that at the close of the first year of the program, project participants were achieving at or above the national norm averages because prior to the program, East Cleveland pupils averaged only seven months of achievement for each twelve months of chronological development, thus resulting in a linear educational deficit that increased each year by three months so as to put these typically urban students cumulatively further and further below grade level expectancies with each year of additional schooling.

Achievement data were analyzed in much detail for each grade level two (2) through six (6). Although the results vary somewhat with the specific grades, several general conclusions can be made:

1. Over all five grade levels, the project students evidenced a 40% overall increase in achievement performance over the typical norm for an urban black population with a high enrollment of poverty children.

2. When compared with three control groups of non-project East Cleveland elementary students, the project participants ranging from 3.4 months to 6.8 months over their non-project peers, thus indicating beyond a doubt that the project students excelled in achievement over their peers within the school system.

3. An eight month pre-post comparison of Stanford Achievement Test battery
median scores for both project students and their non-project East Cleveland peers revealed that unlike the rest of the East Cleveland students, the project students at every grade level attained a rate of growth in achievement equal to or in excess of one month academic growth for one month's instruction - a growth rate equal to that of the "normal" suburban child.

This report has revealed that the project students have benefitted affectively, emotionally, and cognitively, as measured by teacher reports, parent reports, and standardized achievement test data. But what about the students themselves? What were their spontaneous comments about the program?

The most popular comment offered by the project students was "It was fun". More poetically, one fourth grader put it this way:

The Extended School Year is what it's all about.
We be in school sometimes and at other times out.
I like it because we have so much fun.
We get to swim under the sun.
I like going places instead of sitting in school.
The Extended School Year is really cool.
I. East Cleveland: The Social Setting

The design of an educational program must take into consideration the characteristics of the community it is to serve. Hence, it is in order to offer at the outset a social profile of the city of East Cleveland.

The city is located only two miles east of University Circle, connected directly with it by Euclid Avenue, a major Cleveland East Side artery (U.S. Routes 20 and 6) originating at the Public Square in the heart of downtown Cleveland.

East Cleveland is a three square mile city surrounded on three sides of the city of Cleveland, (primarily the Glenville area), and to the south by the city of Cleveland Heights. The current population is approximately 40,000, thus making East Cleveland the most densely populated municipality in the state of Ohio.

Racial change has come rapidly to East Cleveland. In 1960, blacks constituted only 2.4 per cent of the city's population and only 1 per cent of the school system. By 1970, 59 per cent of the city's population and 92.5 per cent of the school district's population was black.

Another way of describing the very rapid change in East Cleveland is in socio-economic terms. As late as the early 1960's the city was predominantly an old middle class suburb. Ever since it grew from a toll stop on the road from Cleveland to Erie and Buffalo, East Cleveland had been a conservative and a Protestant community. The building of the city had been completed by 1925 except for the Forest Hill subdivision on the heights to the south. This subdivision, part of the large summer estate of John D. Rockefeller, was developed immediately before and after World War II when the estate was broken up and a significant portion of its land given to East Cleveland and Cleveland Heights as public parks. For decades the impression was of a well-tended, well-
managed small city of almost exclusively frame houses with summer awnings on streets shaded almost completely in cathedral fashion by tall elms and oaks. The city is shaped like a thin rectangle with its long axis running along Euclid Avenue toward downtown Cleveland. Small shops lined Euclid and Hayden Avenues and the many trolley cars on Euclid Avenue carried shoppers westward, beyond the city line, to the larger and more varied stores at East 105th and Euclid and then to the huge emporiums in downtown Cleveland. Since it was essentially a middle class population, there was little industry in East Cleveland and most of the wage earners commuted to the office buildings on and around the Public Square of Cleveland and to the many industrial plants to the north and east close to Lake Erie and the main lines of the New York Central and Norfolk and Western railroads.

The school system reflected the spirit of the community. Shaw High School was a perennial leader among area high schools academically, socially, and athletically. Graduates were intensely loyal, having sensed that the success they achieved in college and then in industry and in the professions had its roots in the community and its schools. The business of Shaw and its feeder schools was to prepare its students to enter college. In an era in which college was widely thought of as being only for the children of the rich, the East Cleveland schools helped the community realize its aspirations for its young by attaining a high college-sending rate, particularly to the elite colleges on the east coast.

The riots and fires of the Cleveland Hough area in that very hot summer of 1966 intensified the movement of blacks eastward to the Glenville area and to East Cleveland. Americans have an intense love affair with shiny new things and by the mid-1960's it was easy for white East Clevelanders to see that their
city had developed an old physical appearance. Thus the stage was set for a rapid change. It was a typical American scene that had been acted and reenacted many times before in all northern American cities since the 1880's. Poor people streamed in to replace the more affluent moving east to Lake County for a newer, shinier and more contemporary style of living.

The usual indicators simply confirm the fact that poor families have streamed into East Cleveland. The city now ranks second lowest in Cuyahoga County in per capita income. In the two-year period, 1969-1971, there has been an increase of 145 per cent in the number of families on welfare. Students from these families now number 3,325 out of a total school district population of 8,000. The percentage of home owners has shifted during the decade of change from being the highest in the county to that of the lowest. Average family income is now the second lowest in the county. In January, 1971, the unemployment rate of 8.4 per cent for the city of Cleveland as a whole and 11.6 per cent for the designated poverty areas of Cleveland.

School district statistics also validate the changed socio-economic situation. The proportion of older students has increased. The drop-out rate has increased. The number of disciplinary, motivational, and attitudinal problems has increased. Performance on standardized achievement tests has declined. So has the proportion of high school seniors entering college. And until jobs in teaching recently became scarce, the teacher turnover rate has been close to 30 per cent per annum.

But the rapid change in population has been accompanied by an equally rapid change in public leadership in municipal government and in the school district. Both the city council and the board of education are now predominantly black in composition. New talent has been added to the professional staffs of
city government and school districts with a sense of both the urgencies and the possibilities. The immediate effects have been to keep racial conflict at a minimum and to continue the sense of community pride among the new residents. A variety of new programs has been designed and put into operation. New sources of outside funds have been tapped to provide the municipal and educational services that will maintain the vitality of the city. School levies, both of the renewal and incremental types, have been approved by the voters. This has produced the odd situation of a municipality having the second lowest per family income among the 32 municipalities in Cuyahoga County while at the same time the fourth highest total school district tax. The inescapable conclusion is that poor people, like their more affluent fellow citizens, have a firm belief that education is a major medium by which their children can free themselves of the yoke of poverty.

It is in this social setting that the Extended School Year Program emerged. The manner in which this project emerged, a topic for Chapter II, is in itself proof of the continued vitality of this small and proud community.
II. The Extended School Year Program

In the initial application for funds under ESEA Title III, dated 31 January 1970 and entitled "Establishing a Viable Partnership in Staff and Program Development Between the East Cleveland City Schools (ECCS) and Case Western Reserve University (CWRU)," two major purposes were enunciated in the quest to achieve such a viable partnership:

1. To develop mechanisms by which school and university personnel can pool their respective and collective talents to inquire into important curricular and instructional matters in school and university.

2. To utilize these mechanisms as a vehicle for school and university staff development, and for the training of prospective teachers and other educational personnel.

The chief mechanism developed during the first year of Title III funding for joint school district--university inquiry into important curricular and instructional matters was the organization of the Joint Community Council to serve as a management and planning mechanism for all projects conducted jointly by ECCS and CWRU. Even though planning went forward within each project, the idea underlying the Joint Community Council was to establish an overall direction to all joint school district--university projects. The Joint Community Council addressed the critical and major component of community involvement in project planning and management. Its creation reflected the genuine desire of the East Cleveland Board of Education and the administration at the University to work toward a three-way parity relationship; the third party being the community (public) of East Cleveland.

The staff and program development effort in the first year of ESEA Title III funding (1970-71) took the form of a summer school under the
general management of the Joint Community Council.

Eight mixed ECCS--CWRU instructional inquiry teams were formed to represent the staff of the summer school. Each team was composed of nine members to reflect the broad spectrum of educational personnel in school district and university. The specific composition of each team was: three elementary school teachers, a secondary school teacher, an elementary school principal or school district administrator, a university teacher from the faculty of education, a university teacher from the faculty of humanities, a university graduate student, and a university student, undergraduate or graduate, planning to become an elementary school teacher. Each instructional inquiry team was assigned 80 pupils of elementary school age. Four teams had upper elementary (grades 4-6) children and four had children of lower elementary (grades 1-3) age. Each team taught for one and a half hours each morning and planned instruction as a team for an equal period of time. The theme of instruction was communication skills. University personnel were chosen to represent a wide variety of communication areas, such as music, dramatic arts, linguistics, speech, poetry, prose, etc. School district personnel represented the major areas of the school district's curriculum--English, the social studies, science, and mathematics. The diversity of interest and competence represented in the teams indicated that the planning and execution of instruction in communication had very few restrictions.

The student body of 320 was drawn at random from all six elementary schools of the district in proportion to the total enrollment of each school. Drawn in this manner, the student body of the summer school reflected the socio-economic characteristics of East Cleveland as a whole.
The duration of the summer school was seven weeks. The first week was devoted to orientation and planning by the instructional inquiry teams. Pupils attended for the next five and one-half weeks. The last three days of the seventh week were set aside for team review and for making recommendations to the Joint Community Council for joint school-university activities during the 1970-71 school year.

The evaluation of this special summer school was conducted under the auspices of the Joint Community Council by a team of Summer School staff members and members of the Joint Council sitting for the community sector. Three of the general observations made by the evaluation team to the Joint Council were particularly important in planning for the second year under ESEA Title III. These observations were:

1. That a separate district-wide summer school is not as desirable a mechanism for ensuring long-term joint university-school inquiry as is a regular school and its ongoing program. The transitory nature of a special summer school accounts in large measure for this observation.

2. That a separate district-wide summer school is conducted over too short a period of time for the staff to feel that it has adequately assessed and met the social-emotional and learning needs of the pupils.

3. That a separate district-wide summer school which focuses upon staff development through teaching team inquiry does provide unprecedented opportunities for such inquiry with respect to the richness and depth of educational problems that received their joint scrutiny. The opportunity for growth for the professional staff was therefore great. But the opportunity for growth of the participating students was much more limited. A major consequence of such a situation is that the staff tends to make an overall judgment of the effectiveness of the summer school chiefly in terms of student benefits.

With these observations in mind the Joint Council, in the winter of 1971, took up the matter of staff and program development in the second
year of ESEA Title III funding. If the separate summer school of 1970 was a viable mechanism for staff inquiry on curricular and instructional matters but less effective from the student's vantage point, then structural changes needed to be made in the program design so that the six weeks beyond the regular school year is integrated with the approximately 38 weeks of the regular school year. Thus the new extended school year would consist of the required State of Ohio 182 days of instruction with six weeks added and spaced over the almost eleven-month period from September 1, 1971 through July 21, 1972.

The transformation of the regular school year (September 1--June 9) into an extended school year (September 1--July 21) would not mean a regular school year plus six weeks of added instruction in the regular school curriculum. Rather, it would mean that the restructured calendar is available for instruction and that academic year programs are arranged, for both students and their teachers, to reflect their psychological needs, their motivational and physiological rhythms, and their interests and learning styles.

The sentiment in the Joint Council for an extended school year was reflected by a recent report of the Commission on Public School Personnel Policies in Ohio. This report began:

Continued unquestioning adherence to an agrarian school calendar seriously limits the potential educational benefits that could be made available to Ohio school children. The calendar rests solely on the assumption that the traditional 180-day school 'year' together with a 90-day summer vacation, and the usual seasonal vacations is the best way for most students to experience public school education.

The Commission seriously questions this assumption. It believes that the perpetuation of such a calendar is based not
upon a sound analysis of what children need educationally, but rather upon a social phenomenon that has assumed the status of a tradition, both operationally and emotionally. There is no educational rationale capable of sustaining the 180-day calendar as opposed to a longer calendar such as 210, 225, or 240 days. Nor is there any educational rationale which sustains a 90-day summer vacation as something necessary for most children. There are no facts supporting these practices.1

The original rationale of the traditional American school calendar was based on the need to release children from schools to their parents on farms during the summer months. Such a school calendar is no longer appropriate in the contemporary rural setting where machines have replaced human hands and in the urban setting where in Ohio 24 per cent of all school-aged children live in its nine largest cities. The traditional school calendar is made even more obsolete by the recent and continuing revolution in the leisure habits of Americans. Long vacations once taken only by the rich have been replaced by short holidays enjoyed by a much larger proportion of the population. The flexibility of the automobile and the ingenuity of the leisure time industries have combined to provide innumerable options to American families for short holidays throughout the year. This does not mean that all American families can afford holidays away from home. There are still many poor families that can only aspire to travel and to recreation. But those poor families that live in dense urban communities with insufficient recreational resources do not benefit especially from the lengthy three-month summer closing of the schools.

The children of these families are particularly vulnerable in a long, hot summer to crime, vandalism, and exposure in the streets and on the existing playgrounds to inappropriate models of behavior.

Two basic ideas gave the East Cleveland Extended School Year its uniqueness.

The first idea was that of periodic short holidays for students, each of one week duration, throughout the eleven month school year. These holidays would be in addition to the traditional vacations of the school district of two weeks at Christmas and one week at Easter. The rationale underlying these short holidays was essentially to meet the physiological and psychological needs of both students and teachers for rest, reflection, and change of pace. In a word, the major purpose of week-long periodic holidays would be to "renew" students and teachers and at the same time to reduce the tension that inevitably develops, especially in elementary school classrooms, when a teacher and her students are together day after day for several months at a time. The oft heard cry of the teacher in early winter, "If I can only hold on until Christmas!" and in early June, "The children are climbing the walls!" are in large measure reflections of the situation of close living for too long a period of time. The periodic week-long holidays serve to give teachers and students short respites from one another. The holidays would be short enough to allow them to catch their breath and not long enough to allow them to forget education, or each other.

The idea of periodic short holidays thus represents a tradeoff for the six weeks of vacation "lost" to the students in the summer. Students in the
Extended School Year actually have one less week of vacation during a twelve-month year.

Teachers in the Extended School Year were to be put on an eleven-month contract. Thus their week-long holidays were for professional development, that is, for planning, for reading, for reflection, for leisurely interactions with colleagues, for institutes and workshops, for visitations to the classrooms of colleagues in East Cleveland and beyond.

The planning group for the Extended School Year programs established five one-week holidays as follows:

1. October 25--29: 7th week
2. November 22--26: 11th week
   December 20--24: 15th week Christmas vacation for
   December 27--31: 16th week entire school district
3. February 21--25: 24th week
   April 3--7: 30th week Easter vacation
4. May 29----
   June 2 : 38th week
5. July 3--7: 43rd week

The second basic idea unique to the East Cleveland Extended School Year was that of instructional residencies away from the home school -- "classrooms without walls." The six weeks that had been devoted to instruction at the 1970 Caledonia Summer School was now to be interspersed throughout the extended school year. The instruction was to take place in cooperating cultural institutions in Cleveland in residencies of at least one week duration each. The instruction was to be the responsibility of the staff of the education departments of these institutions, with the planning of the residencies to be the joint responsibility of these staffs and the East Cleveland teachers and supervisors in the Extended School Year Program. Student residencies at the cooperating institutions were to be on a full day basis. All 50
students at a particular grade level would be in residence together. Although these 50 students represented the classrooms of two teachers, neither classroom size nor classroom composition had to be maintained during the residencies.

The idea of the instructional residency in cooperating cultural institutions is part of a larger and widespread sentiment in educational circles across the nation that represents a reaction to the highly cognitive emphasis in the schools that followed the Soviet Union's launching of the first Sputnik. There is a decided feeling that the arts and the humanities have been neglected, particularly their contribution to the cultivation of affective sensibilities and an aesthetic orientation. It is certainly pertinent to point out that the first major entry of the federal government directly into education -- the National Defense Education Act of 1958 -- provided funds in large amounts for the re-education of teachers of mathematics, science, and foreign languages. No other disciplines were supported in the legislation.

Part of the cry of the counter-culture generation which received its education in the post-Sputnik era is against the overemphasis in the school on cognitive processes and its coupling with preparation for cognitive activities at the next higher educational level. Even in educational programs where affective outcomes are intended, studies have shown that these outcomes have short lives. They disappear rather quickly.

Part of the cry of the environmentalists is that the overemphasis on the cognitive in the schools has contributed to the general feelings among most Americans that a value orientation no longer guides their lives. Hence an identity crisis and a crisis of social purpose.
The prospectus of the current EPDA Arts Education Program speaks eloquently to this matter:

In recent years there has been a growing and disturbing awareness that the experience of American public schools may be contributing in some ways to the further dehumanization of children through the kinds of success which public school education reinforces including cognitive absorption and retention, demonstrable mastery of performance skills, and conformity in social behavior in a group setting. American education tends to be largely preparatory, that is, education designed to prepare the young for the future. Cognitive retention and skills to be mastered are still determined according to priorities which have not changed significantly in at least in at least two centuries and which still largely ignore the more recent developments such as the media of mass-communications, the changing nature of the work world, and the role of the individual in it. Education with a central focus on aesthetic and affective development might well provide that humane quality so obviously missing now in American education.

The spirit of the residency is reflected in an article on it that appeared in the monthly news magazine of Case Western Reserve University:

(Cleveland's) University Circle, with its museums of art, natural science, history and other cultural and educational institutions is a concentration of excellence. Frequently one sees yellow buses in serpentine lines outside of these buildings. Inside, school children are being whisked by teachers from room to room, supposedly to saturate them with the greatness these institutions contain. But how much is really gained by children in these lightning-fast tours? Not enough, felt a group of people from the Department of Education at Case Western Reserve University, the East Cleveland City Schools, and the East Cleveland community. So they devised an 'Enriched Year Program' which began last September for 300 children in the first six grades at Chambers School in East Cleveland. This is an eleven month academic year in which six weeks of instruction, distributed throughout these eleven months in weekly units, are taken in residence at University Circle institutions.1

Thus the extended year also became an enriched year. For students, the residencies were to extend their psychological life space by having them not only become aware of cultural institutions quite close to their homes but also to know these institutions intimately by utilizing their holdings in support of week-long instructional efforts. Furthermore, students would become acquainted with members of the institution staffs serving as their instructors. Each student would be exposed, in small group instruction, to some 25 different instructors across the six institutions. Many of these instructors would be leaders in their special fields of competence. It was anticipated that intimate contact with a variety of new people in new and different instructional settings would provide new models of behavior for them. Finally, the residency was viewed by the school district administration as a way of enabling students to deal more adequately with the knowledge explosion. The cooperating cultural institutions served as extensions of the Chambers School classrooms, enriching considerably the stimuli experienced by the students and serving in many key areas of knowledge to expose the students to ideas and concepts at the very frontiers of knowledge.

Teachers were also to benefit from the residency in many critical ways. First, it would allow them to be learners and thinkers, to be exposed with their own students to new activities, ideas, and concepts. In special fields of knowledge and expression their awareness would be broadened and deepened. Second, it would enable the teachers to be observers of their own students receiving instructions from others. The chief positive consequence of such observation would be to sharpen the teacher's
ability to process information about particular students. To have some
degree of independence to observe one's students while they are students
is to see aspects of their cognitive and affective behavior which one may
not perceive when one is actively teaching. Third, it would enable the
teachers to see styles of teaching that would be quite different from those
of elementary school teachers in self-contained classrooms. In general,
less interest in controlling and nurturing and greater emphasis on freedom
of individual student behavior and on permissiveness was expected to
characterize the general style of teaching at the cooperating cultural
institutions. Fourth, teachers could see how holdings and resources,
materials and equipment, are used as institutional aids. They could
contemplate the possibilities inherent in the use of such instructional
aids in their own classrooms. Fifth, teachers could see possibilities for
deepening existing and developing new interests and competencies for them-
selves. And finally, it was hoped that friendships would develop between
teachers and residency instructors which would encourage teachers to seek
professional advice in an informal and ongoing manner.

Parents were also to benefit from the residencies through witnessing
changes in the behavior of their children such as more talk about what they
were learning in the residencies, new substantive interests, more reading,
familiarity with the collections of the museums and voluntary visits to them. It was hoped that parents would want the program
continued because of the immediate benefits accruing to their children.

The cooperating cultural institutions immediately saw that their own
public serving functions could be enhanced from participation in the Extended Year Program. The general issue of museums and education has been one that has in recent years been occupying the attention of museum directors and curators of education throughout the country. In August, 1966, the Smithsonian Institution held a Conference on Museums and Education. The published proceedings of this Conference set forth three principal objectives of the conference as:

1) survey the present relations between museums and education;
2) explore possible methods of involving museums more directly and more fruitfully in the educational process at all levels;
3) formulate proposals for research and development activities relating to museums and education. In a broad sense, the purpose of the conference was to learn, or at least to begin to learn, ways making more effective educational use of the more than five thousand museums that exist in the United States.¹

Both the East Cleveland Board of Education and the large variety of special educational institutions in and near Cleveland's University Circle, including Case Western Reserve University, saw the values and wisdom of experimenting with the idea of utilizing University Circle as a supplementary educational center of the school district with residency rather than field trips as the mode of instruction. Much new building of first-rate educational facilities had been designed and built at University Circle in the last two years. In particular, the educational wing of the Cleveland Museum of Art, designed by the eminent architect Marcel Breuer, new class-

rooms, laboratory, lecture hall and exhibit facilities at the Cleveland Museum of Natural History, and radically new physical facilities at the Cleveland Health Museum and Education Center designed and furnished with formal instruction of groups in mind, represented stunning additions to the University Circle landscape and to the educational resources of the greater Cleveland metropolitan area.

It therefore seemed natural and logical for a school district to step in and utilize educational facilities at once so tasteful in their aesthetics and so practical with their latest educational technological support equipment. These facilities could not be used in field trips because of the transitory nature of such an activity. In the main they lay fallow during school days, being utilized by adults on evenings in which the museums were open and by children on Saturday mornings and during the summer vacation.

Other significant factors in the immediate interest of these institutions in the Extended Year Program was the possibility of a wholly new type of educational relationship with public schools and the cultivation of a clientele that generally do not patronize them. These are poor people of the central city neighborhoods which now surround University Circle and caused local urbanologists to call it "a cultural ghetto." University Circle institutions have become quite self-conscious of needing to learn how to reach out and make contact with the residents of the inner city communities.
Six institutions were chosen by the Extended Year Program planning group on the basis of the following criteria or conditions:

1. The institution must possess a formally constituted education department with programs serving children of elementary school age.

2. The institution must be willing to mount a week-long instructional effort on a full-day basis utilizing members of the staff of its education department.

3. The institution must be willing to designate a member of the staff of its education department as supervisor of the East Cleveland program.

4. The institution must be willing to share in the planning of its East Cleveland program with teachers and supervisors of the school district.

5. The institution must be willing to make available to the East Cleveland program space and equipment deemed necessary by those who

6. The institution must be willing to vary the design of the East Cleveland program according to student maturational and developmental factors.

7. The institution must be willing to work within a budgetary allocation for instruction of $10.00 per student residency (Five full days).

---

1. The planning group set up the broad outlines and logistics of the Program during the summer of 1971. Members of the group were: Edward F. Armon, Program Director; J. Joseph Whelan, Principal, Chambers School; Mary Catherine Hagedorn, Teacher, Grade 3, Chambers School; Joanne McQueeney, Teacher, Grade 4, Chambers School; Raymond J. Balester, Vice-Provost, Behavioral and Social Sciences, Case Western Reserve University; Bertram B. Masia, Professor of Education, Case Western Reserve University.

2. An exception was made for the camp residency for students in grades 4, 5, and 6, who were furnished bed and board.
The six institutions chosen to participate in the Extended Year Program were:

1. Karamu House

Karamu House is a Metropolitan center for the arts located at East 89th Street and Quincy Avenue approximately two miles southwest of University Circle and four miles from the center of East Cleveland. Founded in 1915, Karamu House serves the Greater Cleveland area with particular emphasis on the urban communities and with a Black center of gravity and a Black perspective. It has a staff of 75, over half ranked as arts professionals. The Karamu House complex includes art studios, an arena theatre, a proscenium theatre, classrooms and "laboratories" for the various performing and communications arts, four gallery areas, and a day nursery.

The cultural and educational programs include some 55 classes and workshops in all phases of theatre, the visual arts, dance and music, plus special youth programs and experimental labs.

Karamu House program participants vary in age from pre-schoolers to elders. It is very much a multi-racial clientele. Karamu communities-involvement ranges from service-to-the-individual to high impact activities such as the coordination of city-wide cultural arts programs, in-school programs, and cooperative projects with other institutions and organizations.
2. The Cleveland Music School Settlement

The Cleveland Music School Settlement was founded in 1911 as a community-oriented, non-degree giving educational institution, open to children and adults alike. Fees are scaled according to the ability to pay.

The Settlement was the dream of Almeda Adams, who although blind since birth, had mastered and taught music in Cleveland for many years. Told by her father of a school in New York that served people of limited means, she set about establishing one in her own community.  

The Music Settlement's original home was in the Goodrich Settlement House on East 55th Street. As a result of steadily increasing enrollments, the school moved periodically to even larger quarters, first to East 71st Street in 1918, then to East 93rd Street in 1923, and finally to its present complex of buildings at University Circle (East 111th Street). In recent years expansion of the Music Settlement has been in the form of branch schools and existing social agencies. The main complex of buildings, where the Music Settlement component of the East Cleveland Extended Year took place, contains 43 studios, a library, a little theatre, a recital hall, lounges and offices, and a pre-school program. Today there are over 2,000 students at the Main School, another 250 at the West Side Branch, 550 at the South Side Branch, and more than 600 students who receive their musical training at 29 other social agencies through the Settlement Extension program.

The curriculum of the Music School Settlement covers a full range of instruction in all instruments and in theory, ensemble playing, voice, music history, literature and appreciation. Classes in Carl Orff instruments, in ballet, and in modern dance are offered with children of elementary school age in mind.
3. The Cleveland Museum of Art

The Museum's Department of Art History and Education has the responsibility to interpret to the public the works of art acquired, preserved and exhibited in the Museum's galleries. Johnson and Silver, in an attractive pamphlet which describes the many facets of the Museum's educational program, describe the central purpose of the Department in these words:

The Department's instructors believe that their primary goal is to help visitors of every age, circumstance, and experience to respond to the works in the Museum galleries—to see, discover, and appreciate what happens inside a work of art. The beginning and the end of the educational work of this Museum is the personal encounter of an individual with a work of art.¹

To implement this central purpose, the Museum's Department of Education offers to young people a variety of Saturday and summer classes. Characteristics courses are Discovering Museum Treasures, Outdoor Sketching Classes, Art and Movement, and Creative Writing in the Galleries. Children, of course, attend these classes on a voluntary basis. Services to school groups include guided tours of the galleries and advice to teachers on preparing their students for Museum visits. An extensive collection of slides and photographs is available to teachers for use in their classrooms. With the recent opening of the educational wing, the Department is providing additional services to classroom teachers and art supervisors in the form of workshops and in-service courses.

¹ James R. Johnson and Adele Z. Silver. The Educational Program of the Cleveland Museum of Art, p. 3.
4. The Cleveland Museum of Natural History

Harold T. Clark, the long-time benefactor and trustee of the Museum, described its central purpose in 1951 on the occasion of the Museum's thirtieth anniversary:

To bring people into contact with living things such as trees, wildflowers, birds, and animals -- to make them aware of the stars in the sky and the earth beneath their feet, and to interpret these things in understandable terms--is a great and fundamental contribution to human happiness.

In support of this conception the Museum has evolved into one of the major museums of its genre in the United States. On Wade Oval, at University Circle is a modern complex of galleries, auditoria, classrooms, workrooms, research laboratories, libraries, planetariums, observatories, and archives of many research collections containing several million items. The activities of the Museum extend to the out-of-doors through the establishment of many supplementary agencies whose management has since been delegated to others. Included among them are the Holden Arboretum, the Cleveland Zoo, and operation of four trailside museums in the Cleveland Metropolitan Park System and in Gordon Park. Before there was a national effort to preserve rare habitats and outstanding natural features, the Museum acquired and protected the tremendous glacial grooves and Inscription Rock on Kelleys Island in Lake Erie off Sandusky. These and hundreds of acres of rare habitat were ultimately given to the State of Ohio. The Museum now maintains four natural areas as sanctuaries: Mentor Marsh, Fern Lake, Kelleys Island, and Morgan Medina County Sanctuary. To extend the concept of branch museums throughout the entire community, America's first Trailer Museum was created in 1947 and placed into oper-
A second Trailer Museum was produced in 1969.

Educational programs for students include traditional weekend classes, field trips, and the summer programs which in 1972 included classes on Indians of North America, Prehistoric Animals and Man, and Wildlife Conservation Field Studies as well as all-day field trips to a variety of ecological habitats and special projects that include wildlife studies, the collection and preservation of a number of plant and insect species, aquatic surveys, and paleontological collecting and study. Overnight camping trips are utilized for intensive studies of special areas.

In working with schools, the Museum's Department of Education program provides specific lessons for pupils in hundreds of school systems across northern Ohio, south to Columbus, and well into western Pennsylvania. The Museum is also a mecca in the spring for classes on short field trips and provides guides for the tours of the galleries.

In support of the educational effort for school-age children the Museum has a working collection of living birds and animals that the children can touch and hold.
5. Red Raider Camp

Red Raider Camp is located in Geauga County on Ohio State Route 87 just east of State Route 306. It consists of a wide variety of camp buildings located on 300 acres of land containing forests, meadows, streams, and ponds. Within visiting distance of the camp are historical buildings, farms, Amish settlements, and other areas which show the country life-style and give a sense of what life had been like in the early days of the Western Reserve.

The camp was chosen to be part of the Extended School Year Program because it offers a desirable environment in the greater Cleveland area for outdoor education for children living in a highly urbanized community. It was also selected for its proximity to the east side of Cleveland. Although Geauga County is immediately to the east of populous Cuyahoga County, it has succeeded in maintaining its original Western Reserve and rural characteristics throughout the post-World War II era of explosive metropolitan Cleveland enlargement.

Not to be overlooked, of course, was the opportunity for the students to live together for a week away from their families. For many of the Chambers School students, this would be their first opportunity to live in an outdoor country setting and also to be away from their families.
6. The Cleveland Health Museum and Education Center

The CHMEC was the first health museum in the United States. Founded in 1940 as a result of interest by professional and lay groups in improving the health and welfare of individuals, the Museum provides a year-round planned program in health education with an emphasis on visual media to enhance the communication of health knowledge.

In 1972 the Museum completed its first major physical expansion program which enabled it to separate in a deliberate manner the educational activities from the browsing museum activities. This permitted the Museum to carry out special educational programs independently in the Education Center or in conjunction with the rest of the museum as needs of the community are ascertained.

The new and enlarged Museum contains some 27,000 square feet of exhibit space and a new 155 seat community health education auditorium. The Education Center consists of 13 experimental teaching theatres in various areas of health, a multi-media resource center, offices for the Center's staff, as well as health and environmental education agencies housed at the center.

The CHMEC is located on Euclid Avenue in Cleveland, approximately one-half mile west of University Circle.
The overall calendar of the residencies was as follows:

<table>
<thead>
<tr>
<th>Month</th>
<th>Date</th>
<th>Institution</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>September</td>
<td>20-24</td>
<td>Karamu House</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>27-31</td>
<td>Karamu House</td>
<td>4</td>
</tr>
<tr>
<td>October</td>
<td>1-8</td>
<td>Karamu House</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
<td>Karamu House</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>18-22</td>
<td>Karamu House</td>
<td>1</td>
</tr>
<tr>
<td>November</td>
<td>1-5</td>
<td>Karamu House</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>8-12</td>
<td>Music School Settlement</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>15-19</td>
<td>Music School Settlement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>29-3</td>
<td>Music School Settlement</td>
<td>4</td>
</tr>
<tr>
<td>January</td>
<td>3-7</td>
<td>Art &amp; Natural History Museums</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>10-14</td>
<td>Art &amp; Natural History Museums</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>17-21</td>
<td>Art &amp; Natural History Museums</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>24-28</td>
<td>Art &amp; Natural History Museums</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>31-4</td>
<td>Art &amp; Natural History Museums</td>
<td>2</td>
</tr>
<tr>
<td>February</td>
<td>7-11</td>
<td>Art &amp; Natural History Museums</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>14-18</td>
<td>Art &amp; Natural History Museums</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>28-3</td>
<td>Art &amp; Natural History Museums</td>
<td>5</td>
</tr>
<tr>
<td>March</td>
<td>6-10</td>
<td>Art &amp; Natural History Museums</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>13-17</td>
<td>Art &amp; Natural History Museums</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>20-24</td>
<td>Art &amp; Natural History Museums</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>27-31</td>
<td>Art &amp; Natural History Museums</td>
<td>4</td>
</tr>
<tr>
<td>April</td>
<td>10-14</td>
<td>Music School Settlement</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>17-21</td>
<td>Music School Settlement</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>24-28</td>
<td>Music School Settlement</td>
<td>1</td>
</tr>
<tr>
<td>May</td>
<td>8-12</td>
<td>Red Raider Camp</td>
<td>3 &amp; 6</td>
</tr>
<tr>
<td></td>
<td>15-19</td>
<td>Red Raider Camp</td>
<td>2 &amp; 5</td>
</tr>
<tr>
<td></td>
<td>22-26</td>
<td>Red Raider Camp</td>
<td>1 &amp; 4</td>
</tr>
<tr>
<td>June</td>
<td>12-16</td>
<td>Health Museum</td>
<td>6 &amp; 3</td>
</tr>
<tr>
<td></td>
<td>19-23</td>
<td>Health Museum</td>
<td>5 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>Health Museum</td>
<td>4 &amp; 1</td>
</tr>
</tbody>
</table>

1. The residency period was split into 10 half-days (mornings) at the Museum of Art and 10 half-days (afternoons) at the Museum of Natural History. Thus every student had the equivalent of one full week of residence at each museum.

2. Grades 4, 5, and 6 lived at camp for the week. Grades 1, 2, and 3 commuted daily to the camp from East Cleveland.
Procedures for Selecting Students for the Extended School Year Program

The Program blueprint called for the establishment of two 25-student classes at each grade level from one through six. Initially, students were selected at random in the spring of 1971 so that the Program classes would represent a true cross-section of the total Chambers School population of approximately 925 students.

Once the initial selection was made a letter was sent in May to the parents of those selected asking for their approval of the participation of a particular child in the Program. Concurrently a series of parental meetings were held to describe the program in detail and to answer parents' questions.

After receiving parental replies, the names of children whose parents disapproved of participation in the program were eliminated from the program roster. The orientation meetings with parents seemed to have been successful because very few disapproval forms were received.

Because of the one-week calendar of the Extended School Year, all children in a particular family were included. The 300 students represented 138 family units, or on the average slightly more than two children per family.

Meetings with parents continued throughout the summer of 1971 to enable them to have full comprehension of the unique calendar, particularly the periodic one-week holidays and the six periodic residencies.

Only twelve students were lost to the Program, all because their families moved out of the school district. Although there are no hard data
to confirm it, there is a decided suspicion that participation in the 
Program reduced the possibility of physical mobility for the families 
involved, at least for the duration of the first year of the Program.

Procedures for Selecting Teachers for 
the Extended School Year Program

In the early spring of 1971 all 37 Chambers School teachers for the 
forthcoming 1971-72 school year were invited by their principal, J. Joseph 
Whelan, to indicate a willingness to participate in the new Program, the 
outlines of which he sketched for them at a faculty meeting. The desire 
to participate was expressed by 24 of the 37 teachers. Replies with regrets 
were received from several other teachers whose commitments for a full 
summer 1972 holiday for travel or study or teaching in another program 
had already been made.

Given two teacher slots at each grade level, Mr. Whelan chose 12 of 
the 24 by random selection within the limits of a grade level quota. Where 
there were only two applicants among the five or six teachers at a grade 
level, both were chosen. Where there were more than two applicants, the 
two selections were made by lot.

Teacher selection made in this manner caused no staff problems at 
Chambers School during the 1971-72 school year. Even though the Extended 
School Year Program classes constituted a school of 300 students within a 
school of more than 900, the danger of an "in-group-outgroup" situation 
did not materialize for either teachers or students.

What were the characteristics of the 12 teachers who participated in 
the Extended School Year Program? Eleven were women. All twelve held
bachelor degrees. In addition, one held a master's degree. All degrees, of course, were in elementary or early childhood education.

Nine of the 12 teachers took their undergraduate preparation at colleges in Ohio. Four of the nine were certified to teach at St. John College in Cleveland. Cleveland State, Kent State, Bowling Green State, Wilberforce, and Western Reserve were each represented by one teacher.

Out-of-state colleges attended were Radford College, Virginia (1), Rio Grande College, Texas (1), and the College of St. Francis, Illinois (1).

Table I indicates the distribution of the number of years that the teachers had been in the teaching profession and the number of years they had been teaching in East Cleveland.

```
<table>
<thead>
<tr>
<th>No. of years in the Teaching Profession</th>
<th>No. of Teachers</th>
<th>No. of years in E. Cleve.</th>
<th>No. of Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1/12</td>
<td>1</td>
<td>1/2</td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>1</td>
<td>25</td>
<td>1</td>
</tr>
<tr>
<td>30</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
```

By and large it was a young group. The typical teacher had, at the outset of the Extended School Year Program in September, 1971, taught one year and that year was taught in East Cleveland. Only two teachers could be viewed
as veterans, one with 21 years of teaching and the other with 30 years. Nine of the 12 teachers had taught exclusively in East Cleveland.

The principal, too, was young. He taught for four years and had served as a principal for two. His bachelor degree was taken at John Carroll University and his master's degree at Case Western Reserve University.
1. Karamu House

The residence at Karamu House focused on four areas of the performing and communications arts: a) Modern Dance; b) Creative Dramatics; c) Film; and d) Art.

The central organizing element that unified these four "subjects" was the physical and psychological self-image of the student—to experience it in dance, to represent it in art, and to project it in dramatics and on film. All areas of the Karamu program encourage free expression in which the student determined its content, form and texture. The role of the staff was as guide to such expression.

The program for the older children included a tour of the Karamu theatres and a demonstration of theatre techniques, demonstrations in special workshops by adult students, and a short talk on the founding of Karamu and its subsequent history. The purpose of this orientation was to satisfy the natural curiosity of children about such attractive places as the theatres and the pottery making facilities as well as to give black children a sense of identification with an institution having a black perspective. It was the hope of the Karamu House staff that the students and their parents would attend the theatres and enroll in the courses.

All instruction was in small groups of 12-15, with instruction in each "subject" lasting approximately one hour per day.

The program of instruction at Karamu House was also designed so that the Chambers School teachers could see new possibilities for instruction in their own classrooms. For example, in the art studio a much larger variety
of materials was made available to the students than had been offered them at Chambers School.

In addition to the ubiquitous crayon, students explored with acrylic paints, water colors, clay, paper of various sizes and textures, gum tape, and other materials. New types of productions ensued — masks, murals, life-size drawings of themselves, collages, and painted clay pots. The instructor made suggestions from time to time but the students made their own decisions as to materials, what to do with them, and with whom to work, including the decision to work alone.

Dance was structured along particular lines with an emphasis on basic ballet movements and rhythmics with drum accompaniment. Both bodily and facial expression were stressed. Students also saw the possibilities of dance as an expression of inanimate objects, such as a tree and the wind. Fifth grade students used homemade rhythm instruments to create a dance background and put it on tape. The next day they did a creative dance with the tape serving as background and stimulus.

The five senses were explored in Creative Dramatics. Activities in support of this objective were acting as shapes, mirror acting, individual pantomimes, portraying concepts of hot and cold, walking through glass, watching an imaginary television program, doing a fairy tale, and playing a scene from an everyday place. Short skits were planned and performed by the older students and they evaluated these productions in terms of the effects produced by particular actions. Concepts such as make believe and pantomime were also discussed.

The Film course gave the students the opportunity to make films and
slides of short dramas of tales they knew. In addition, students learned about different types of film and the various techniques used in making them.

2. The Cleveland Music School Settlement

The Karamu House residence did not focus on musical expression except in the use of drums and homemade instruments as aids to Creative Dance. The Music School Settlement gave the East Cleveland students a very concentrated week of music. As with Karamu the emphasis was on doing and on active mastery of technique and theory. Again, the day was divided into four subjects and the students were divided into instructional groups of twelve. The subjects were: a) Carl Orff instruments, b) guitar, c) recorder, and d) group singing and folk dancing. Approximately one hour was devoted each day to each subject. Since the attention span of the younger children was shorter, the instructional day for the two youngest grade levels was divided into 30 and 40 minute sessions with each subject repeated in the afternoons.

Musical instruments were available in sufficient number so that each class had as many instruments as there were students. Recorder and guitar instruction included specific psychomotor techniques in fingering, strumming, holding the instrument and cognitive operations such as notation, chord configuration, timbre, pitch, beat sight reading, and composition. Songs that had been learned at home and at school served as the basic music literature. Satisfaction in response was a primary affective objective. The Music School Settlement, like Karamu House, hoped that the possibilities inherent in further study of a musical instrument would be
appreciated by many of the East Cleveland students.

The classes in group singing and folk dancing were in part an ex-
tension of the Karamu House residency and in part an extension of the
instrumental classes. Dancing and singing were integrated and the students
were introduced to new vocal genre. Songs were compared and evaluated in
terms of the common dynamic musical properties in an attempt to develop
listening skills.

3. The Cleveland Museum of Art

The two non-consecutive weeks (half-days) of instruction at the
Cleveland Museum of Art was organized around a theme devised jointly by
the twelve Chambers School teachers in the Extended School Year Program
and the staff of the Museum's Department of Education. The theme was
"Exploring man's creative (mind and spirit) experience through his art."
More specifically, and arising directly from this theme, the instruction
was a) to examine man's relationship with people: family, child to child,
and other relationships expressed in his art; b) to examine man's imag-
ination; c) to examine man's environment, both natural and man-made;
d) to examine man's image of himself; e) to examine man's power to over-
come and to explain what is beyond reason: his myths, his stories, his
religions; and f) to examine man's ethnics and his moral behavior.

To implement this prospectus, the typical weekly calendar of instruction
as arranged by the Museum Department of Education staff was:

<table>
<thead>
<tr>
<th>Monday</th>
<th>Introduction to the Museum and its facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Introduction to Tuesday and Wednesday instruction</td>
</tr>
<tr>
<td></td>
<td>in a) Creative Writing; b) Studio</td>
</tr>
</tbody>
</table>
Tuesday
Creative Writing: in classroom and gallery

Wednesday
Studio: in classroom and gallery

Thursday
Ceramics
Art History
Modern dance interpretation: in Oriental gallery (India)
Modern dance interpretation: in African and contemporary galleries

Excerpts from the logbooks of activities kept by the East Cleveland teachers indicate the richness and variety of their student's experiences.

From the logbook of a first grade teacher:

First Week

Monday
Introduction to museum and facilities
Group A: Creative expression. The Orange Thing read by instructor. Then visits to "orange things" in the galleries and observations and discussions by students.

Group B: Studio. Film entitled "Shapes." Discussion on lines. Children drew lines on chalkboard. They created their very own lines (curved, straight, etc.) on paper.

Tuesday
A: Creative expression. Walks through the galleries viewing various paintings with emphasis on texture, colors, and shapes.

B: Studio. Feeling textures in boxes: cotton, bristles, etc. Created collages using leather, fabrics, etc.

Wednesday
A: Students painted standing with paper on walls.


Thursday
A: Ceramics. Simplified techniques shown for clay in making of coil and pinch pots.

B-1: In galleries for special exhibition entitled "Women."

B-2: Movement in galleries. Students described and named shapes in painting. They described how the painting made them feel. Emphasis was on spatial direction. A bongo drum was used to motivate creative movement (Indian and African galleries).
Friday  
B: Ceramics (same as Thursday Group A).

A-1: Galleries (same as Thursday Group B-1).

A-2: Movement in galleries (same as Thursday Group B-2).

Second Week

Monday  
Recalling information about museum and facilities

A: Creative expression. Students in a circle. Asked what they wished for, after which pictures were drawn.

B: Studio: slides of paintings and sculptures in museum shown.

Tuesday  
A: Walk in the American, 18th and 19th century galleries. Students named and described works of art.

B: Studio. Instructor drew outline of action pose. (1) Myths expounded: Why mallards have white rings around their necks? (2) Task: Think up and draw a myth.

Wednesday  

B: Creative expression: Walk in the galleries -- Renaissance, late 19th century, 20th century. Task: finding paintings according to clues.

Thursday  
A: Ceramics. After slide presentation, masks were made using clay with various expressions and moods.

B-1: In galleries.

B-2: Movement in galleries. Focus upon arms and fingers of Buddhist and Hindu sculptures. Use of body movements in Chinese and Japanese screens. Necessary historical background provided by instructor.

Friday  
B: Ceramics (same as Thursday Group A).

A-1: In galleries.

A-2: Movement in galleries (same as Thursday Group B-2).

The notes in part on instructional activities from the logbook of a fourth grade teacher reveals their rich variety.
Ceramics: Working with clay: review of different shapes; put clay into basket shapes; make a ball of clay and pinch into a pot; put a design on the pot. History of clay and the beginnings of written language. Galleries: toward making a container in the shape of an animal: make a design on it. Make clay drums; decorate with cellophane. Make clay masks.

Movement in the galleries: Discussion of statues. Who is Buddha? Why so many hands? Statues do different things. What? Try to feel what statue is. Make formations with body. Try to feel the waves in the paintings. Try to feel like a tree.


4. The Cleveland Museum of Natural History

The Cleveland Museum of Natural History is dedicated to "inspire a love of nature." These words of Jason J. Nassau (1892-1965), internationally famous astronomer, director of the Warner and Swasey Observatory of Case Western Reserve University and trustee of the Museum, may seem naive and simple today but they represent, nevertheless, the very heart of the Museum's mission and activities. Mary E. Flahive, Education Supervisor of the Museum, writes in greater detail in behalf of an educational philosophy for the Museum's East Cleveland program:

It is through an understanding of the rhythms of nature that one can begin to understand himself and his place in the world and in the universe. No matter how high we rise above the earth, or how deeply we descend into it, we are bound by the laws of nature.

An intimate knowledge of the living and non-living components of our natural surroundings and an understanding of man's relationship to nature is necessary for every individual, child or adult, to place himself in the proper perspective of his environment.
Each year it is more important for man to live in harmony with his environment for his very survival. Day by day as man alters his immediate surroundings, he is breaking the rhythm, the pattern of nature.

Small beginnings can be made by studying animals, plants, stars, rocks, and minerals at an early age. These studies, if continually pursued, will lead to respect for life of all kinds, to an appreciation of the natural world and hopefully to respect for oneself and fellow man.

On the basis of this educational philosophy, the education staff of the Museums and the East Cleveland teachers in the Extended School Year Program developed a series of grade level themes that would govern instruction at the Museum for the Chambers School students. These themes were:

1. Grade 1: Looking at Animals: Sharpening the Five Senses
   2. Environments of Animals and People
   3. Environment and Relationship to People and Animals
   4. Physical Features of Earth and Effects on Environment
   5. Biological and Geological Contributions to Total Environment
   6. Past and Present Environments and Their Relationship to Modern Scientific Studies

As with the program at the Museum of Art, it was necessary to focus on a theme so that the immense holdings of the Museum could be used selectively. Aside from a general orientation to the museum on the first day, there was no attempt to cover all galleries and collections.

Instruction took place in two non-consecutive weeks (half-days). Detailed programs of instruction are presented below for grades 2 and 5:

**Grade 2**

**First Week**

**Monday:** Divide 50 students into 5 groups. Look for "classes" of animals in galleries. Choose animal name for each group.

**Tuesday:** Living animals. Characteristics of animals -- fish, amphibians, reptiles -- observed by children. Activities of these animals at different seasons of the year.

**Wednesday:** Living animals. Study birds and mammals using living animals. Activities of these animals at different seasons of the year.
Thursday: Effects of weather and water on geologic formations.  
           Fossil preparation viewing.

5. Red Raider Camp

The East Cleveland program at Red Raider Camp emphasized outdoor education as both an extension and enrichment of the regular school curriculum and as a means by which children who have experienced a highly concentrated urban environment all of their lives can have a direct and extended experience in a radically different type of environment.

Writing to the parents on the educational values of outdoor education, William H. Gordon, director of the East Cleveland at Red Raider Camp program, said:

Outdoor education is education in the out-of-doors. It is not a separate discipline with its own prescribed objectives, but a learning climate wherein the school curriculum is enriched through direct experiences.

An outdoor education program is closely correlated with classroom activities and becomes an extension of the classroom. The teacher and the students plan much of the experience together and acquire new skills and knowledge in pre-camp preparation. They share the experience as a group and after returning to the classroom build on the learnings through follow-up activities.

The outdoor environment can provide a laboratory setting for many of the curriculum areas, but by its very nature it is particularly suited to learnings in the natural sciences and social studies. Language arts, mathematics, physical education, health, art, and music are other curriculum areas which are effectively taught at school camp.

Many values result as by-products of a school camp experience. The time away from home can aid in the achievement of self-reliance. Increased responsibility, initiative, appreciation of fellow students, and improved teacher-pupil relationships are further outcomes that often result from the camp experience.

Activities at camp that served as extensions of the school curriculum were:
Language Arts: letter writing; creative writing; dramatics; story-telling; daily diary.

Science: plant and animal study; conservation projects; pond study; soil profiles; individual investigations.

Social Studies: pioneer history; use of maps; our place in the natural environment; economic values.

Mathematics: compass and map work; tree and soil surveys; estimation.

Health and physical education: hiking; wide games; healthy environment; conservation work projects.

Citizenship: group living experience; good sportsmanship; increased responsibilities; appreciation of nature; self-reliance.

The three upper grade levels constituted the Overnight Camp in which classes arrived on Monday morning and stayed at camp until Friday afternoon. A typical weekly calendar of activities was that of the fourth grade. The camp day was divided into three program areas based around the meal schedule -- morning, afternoon, and evening. Camp director and teachers were assisted by East Cleveland Shaw High School juniors and seniors who served as counselors.

**Monday:**
- **Morning** -- introduction to camp; hike to beech-maple forest
- **Afternoon** -- move into bunk rooms; write letters home; decide on schedule of responsibilities for entire week (setting tables; after-meal cleanup; lavatory and washroom cleanup; etc.); hike to waterfalls; free time; afternoon duties.
- **Evening** -- campfire: singing; stories

**Tuesday:**
- **Morning** -- hike to Iroquois Falls; build campfires and prepare noon meal.
- **Afternoon** -- tug-of-war at the creek; hike back to camp in streams; free time; afternoon duties.
- **Evening** -- wide games; showers

**Wednesday:**
- **Morning** -- prepared and packed picnic lunch; field trip through Amish country; lunch at farm and tour of farm.
- **Afternoon** -- Tour of cheese factory; visit and examine Ansel's Ledges; visit museum of American Society of Metals.
- **Evening** -- Hay ride; marshmallow roast
Thursday: Morning-- and Afternoon-- Two groups: (1) Stream hike to Devil's Bathtub and Giant's Footprint (mineral waters); (2) Hike to Fat Man's Squeeze, Dragon's Mouth, pine forest, Wiley's cave, and cemetery. Crafts, Free time; afternoon duties. 
Evening-- scavenger hunt; bubble gum contest; talent show; showers.

Friday: Morning-- Final bunk cleanup; took first graders on hike to various caves, etc. 
Afternoon-- loaded bus with gear; final campfire with memory sticks.

A day camp program was arranged for the lower three grades. Robert Etling served as day camp director. The program at this level is revealed in the notes kept by two second grade teachers:

During the week at camp we kept our classes together (two groups). We had three counselors from Shaw High School to assist us. The day camp director was our guide. We divided each day into two parts. In the mornings Mr. Etling would take one class for their nature and camp study. The other class and teacher would do a related activity on their own. After lunch the two groups would interchange activities.

Monday: A.M. Mr. Etling took the children to the maple syrup house where they tasted maple sugar candy. Teacher directed: stick painting of nature in the lodge. P.M. Rain! Saw slides of wildlife.

Tuesday: Mr. Etling took the children to a pond. They were able to catch tadpoles. Teacher directed: painting.

Wednesday: Mr. Etling. Hike with subject of study being wildflowers. Treasure hunt in small groups to discover wildflowers. Teacher directed: Visit to farm at camp with emphasis on animals.

Thursday: Mr. Etling. Outdoor living including fire building and preparing lunch and roasting marshmallows. Teacher directed: Evergreen planting in fields.

Friday: Mr. Gordon and the fifth graders took charge. Hike to learn pioneer history. P.M. Mr. Etling built a campfire and each child was given a stick to put on it while he told of one memory he had of camp.

6. The Cleveland Health Museum and Education Center

The Director of Education, Roberta A. Jones, described the perspective underlying the program for East Cleveland as "striving for a healthy respect for the functioning of the student's own body and its care. Through this educational program the student can come to realize that his actions do
make a difference."

Topics covered in the week-long instruction at the CHMEC were: dental health; the five senses; nutrition; genetics; pollution; reproduction; drugs; anatomy and physiology; and infectious processes. All instruction took place in a multi-media environment in which push-button exhibits, equipment for making tests, and phase-contrast microscopes were used directly by the students.
CHAPTER III
EFFECTS ON STUDENTS

1. Attitudes of Students: Structured Questionnaire

A ten-item questionnaire was devised to assess the sentiments of the students in the Extended School Year Program toward themselves as students. It was administered in mid-June, 1972, toward the end of the academic year when students had developed a perspective on the year. The attitudinal-type statements to which the students responded allowed them to compare the current academic year (1971-72) with the one that immediately preceded it (1970-71). Response alternatives were set in a "Yes-No" configuration so as to evoke global responses. To avoid possible confusion in student comprehension of the stimulus statements, especially among the younger ones, all ten were written in a positive manner. The standard psychometric procedure of offsetting a response set by writing half of the statements in a negative fashion was not followed.

The ten statements of the questionnaire were:

1. I like school better this year than last year.
2. My teacher pays more attention to me this year than last year.
3. I do better work in school this year than last year.
4. My teacher knows me better this year than last year.
5. I am happier in school this year than last year.
6. The things we do in school this year are more fun this year than last year.
7. My parents ask me about school more this year than last year.
8. The other kids like me better this year than last year.
9. I am proud of the work I do in school this year more than last year.
10. I learn more in school this year than last year.

The procedure in administering the questionnaire was for the teachers to read the statements to the children one at a time, and after each statement make the comment:

Look at number ___ (on your answer sheet). If you think what I just said was right, put an X on the CIRCLE next to the number ___ for YES. If you think what I said was wrong, put an X on the BOX next to number ___ for NO.

The teacher's statement of orientation to her students was:

We want to find out what you think about our school. I am going to read some things to you one at a time, and after each time we want you to mark either YES or NO on the sheet I just gave you. Don't make any marks until I tell you. Each time after I read I will tell you where to mark — next to the one, or the two, or the three, and so on.

The question of the validity of this type of response situation is a legitimate one. The question is to what extent a set developed to choose "Yes" which was relatively independent of the nature of the statements. A check on validity was made by including two statements, the second and the eighth, which were not directly traceable to effects of the Extended School Year Program. It was reasoned that if these statements elicited a smaller proportion of "Yes" responses in the total population, higher proportions that might be obtained for the other statements would be considered as percentages reflecting particular sentiments.

Table II indicates that the desired result was obtained.
TABLE II

<table>
<thead>
<tr>
<th>Statement No.</th>
<th>In Agreement</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>212</td>
<td>79</td>
</tr>
<tr>
<td>2</td>
<td>168</td>
<td>62</td>
</tr>
<tr>
<td>3</td>
<td>196</td>
<td>73</td>
</tr>
<tr>
<td>4</td>
<td>188</td>
<td>70</td>
</tr>
<tr>
<td>5</td>
<td>214</td>
<td>79</td>
</tr>
<tr>
<td>6</td>
<td>237</td>
<td>88</td>
</tr>
<tr>
<td>7</td>
<td>206</td>
<td>76</td>
</tr>
<tr>
<td>8</td>
<td>180</td>
<td>67</td>
</tr>
<tr>
<td>9</td>
<td>204</td>
<td>76</td>
</tr>
<tr>
<td>10</td>
<td>239</td>
<td>89</td>
</tr>
<tr>
<td>Total</td>
<td>2044</td>
<td>76</td>
</tr>
</tbody>
</table>

The percentages of the respondant population in agreement with statements on teachers paying more attention to students (No. 2) and on other students liking them more (No. 8) are by far the lowest in the set of ten.

Another way of looking at Table II is to examine the questions that yield agreement levels above the grand mean of 76 per cent for all statements and grades combined. Four statements yielded agreement levels in excess of 76 per cent. These had to do with liking school better (No. 1), happier in school (No. 5), things done in school are more fun (No. 6), and more learning in school (No. 10). All four statements deal with desirable affective outcomes of the Extended School Year Program. The agreement levels of two other critical statements -- pride of work in school and parental questions about school -- are at the grand mean level.

A more detailed view of student sentiment is provided in the grade level breakdown in Table III.
TABLE III

Per Cent of Students at Each Grade Level in Agreement With the Questionnaire Statements

<table>
<thead>
<tr>
<th>Statement No.</th>
<th>Per Cent Agreement for Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>1</td>
<td>80</td>
</tr>
<tr>
<td>2</td>
<td>76</td>
</tr>
<tr>
<td>3</td>
<td>89</td>
</tr>
<tr>
<td>4</td>
<td>78</td>
</tr>
<tr>
<td>5</td>
<td>83</td>
</tr>
<tr>
<td>6</td>
<td>70</td>
</tr>
<tr>
<td>7</td>
<td>83</td>
</tr>
<tr>
<td>8</td>
<td>71</td>
</tr>
<tr>
<td>9</td>
<td>89</td>
</tr>
<tr>
<td>10</td>
<td>85</td>
</tr>
<tr>
<td>Total</td>
<td>81</td>
</tr>
</tbody>
</table>

The first statement, "I like school better this year than last year," was included to serve as an overall indicator of affect. All grade levels, except grade 2, produced affirmative responses in the relatively narrow range of 79 to 85 per cent. The second grade results are directly traceable to one classroom where two-thirds of the students did not agree with this statement.

The third and tenth statement are related -- one dealing with "work in school" and the other with "learning in school." At all grade levels, except grade 1, the proportion of students who agreed that they learned more in school this year than last year was higher than with regard to doing better work in school this year than last. Across all grades, 73 per cent of the students were in agreement about doing better work, but an impressive 89 per cent felt they learned more. The Extended School Year Program as a "school without walls" had
as one of its central purposes the emphasis upon exposing the students to new learnings, especially in the residencies. The very high level of agreement with the statement on having learned more in school this year than last, a level higher than for every other statement, is to be attributed to the incremental learning experiences of the residencies.

2. Student Attendance

School attendance is a simple but significant barometer of such affective characteristics as interest, enthusiasm, and enjoyment. It also serves as an indicator of the validity of the questionnaire data presented in the previous section.

Table IV summarizes the attendance figures for approximately 300 students in the Extended School Year Program for both the total regular nine month school year and for that year broken down into nine-week quarters. Comparison data are also provided for (a) the other five East Cleveland elementary schools; (b) the 600 Chambers School students not in the Extended School Year Program, and (c) Chambers School in the previous school year (1970-71). All figures in Table IV are expressed as percentage rates of absence.

**TABLE IV**

Absent-From-School Percentage Rates for Extended School Year Population and Other East Cleveland Elementary School Populations; by Total School Year and Quarter

<table>
<thead>
<tr>
<th>Elementary Population</th>
<th>Absence Rate For</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>School Year</td>
</tr>
<tr>
<td>Chambers-Program</td>
<td>3.4</td>
</tr>
<tr>
<td>Chambers-Non Program</td>
<td>4.4</td>
</tr>
<tr>
<td>Chambers, 1970-71</td>
<td>4.6</td>
</tr>
</tbody>
</table>
### TABLE IV

<table>
<thead>
<tr>
<th>Elementary Population</th>
<th>School Year</th>
<th>Quarter 1</th>
<th>Quarter 2</th>
<th>Quarter 3</th>
<th>Quarter 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School A</td>
<td>4.7</td>
<td>2.8</td>
<td>5.8</td>
<td>6.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Elementary School B</td>
<td>3.6</td>
<td>2.5</td>
<td>5.2</td>
<td>3.8</td>
<td>2.9</td>
</tr>
<tr>
<td>Elementary School C</td>
<td>4.9</td>
<td>3.5</td>
<td>5.8</td>
<td>5.7</td>
<td>4.7</td>
</tr>
<tr>
<td>Elementary School D</td>
<td>5.1</td>
<td>3.6</td>
<td>5.6</td>
<td>6.1</td>
<td>5.0</td>
</tr>
<tr>
<td>Elementary School E</td>
<td>5.2</td>
<td>3.8</td>
<td>6.1</td>
<td>5.1</td>
<td>5.8</td>
</tr>
<tr>
<td>School A--E</td>
<td>4.7</td>
<td>3.3</td>
<td>5.7</td>
<td>5.3</td>
<td>4.6</td>
</tr>
</tbody>
</table>

Quarters 2 and 3 include the cold winter season and therefore student absence should normally be higher as a consequence of greater health hazards in cold and icy weather. The data of Table IV reveals convincingly that school attendance of Extended School Year Program students is the highest of any elementary school population in the school district. Even in the cold weather quarters a reduction in absence of 20 per cent occurred in comparison with absence of non-Program Chambers School students and of 30 per cent when Program absence is compared with absence in the other five elementary schools combined.

Student attendance during the residencies was appreciably lower than for the school year as a whole. The average daily absence rate during the 36 residency weeks (6 grades x 6 residencies) was 2 per cent. This means that on a typical day in which two classes of approximately 50 students (25 in each class) were in attendance at a cooperating cultural institution, only one student was absent. Many parents reported in interviews that their children often insisted on getting to the bus in the morning despite colds and fevers.

Throughout the Extended School Year, between September 1 and July 21, 32 or 11 per cent of the 288 students who completed the entire extended school
had perfect attendance.

Of even greater significance was attendance during the six academic weeks following the formal end of the regular school year. The weather during this period was unusual. There was almost three weeks of heavy rainstorms and violent winds which was part of the hurricane that caused record floods along the river valleys of northern and central Pennsylvania and the southern tier of New York counties. A long hot and humid spell followed the storms during which time temperatures at the non-air conditioned Chambers School were in the nineties and the humidity levels were generally over 80 per cent. Despite this adverse weather and the fact that all other East Cleveland children were on vacation, 118 or 41 per cent of the 288 students in the Program had perfect attendance records during the final six-week period of the Program.

Visitors to Chambers School during this period commented on the complete absence of tension in the classrooms and on being surprised at not seeing disorder and inattention precisely because it was summer vacation time. Parents, too, in the final interviews expressed their pleasure in their children going off to school in the hot weather without noticeable complaint. Teachers attributed the high rate of summer attendance to the overall rhythm of the entire extended school year which kept teachers and students alike from "climbing the walls" at any particular time. In the very last week of classes teachers were heard to comment that they and their students were reluctant to go off on summer vacation. Everyone was "rolling" in a relaxed manner and the five-week holiday coming up before the start of a new school year was, in the words of one teacher, "not a big deal."
3. Student Adjustment Toward School

The Rating Scale for Pupil Adjustment (Chicago, Science Research Associates, Inc.) was used to evaluate changes in the social and emotional adjustment of students in the Extended School Year Program. All twelve teachers in the Program filled in a copy of the rating scale for each of their students approximately five weeks after the 1971-72 school year began. All forms were turned in as soon as they were completed. A second form was completed for each student two weeks before the close of the extended school year. This second set of ratings was made without reference to the first set. To serve as a control or comparison group, the beginning- and end-of-school year procedure for rating was concurrently made by twelve other teachers at Chambers School (same school; non-Program) and by twelve teachers at Mayfair School in East Cleveland (different school; non-Program) which serves the same general community as Chambers School. Each control group of twelve teachers were equally divided according to grade level (two teachers per grade level) and were chosen at random. The analysis of the data was made by grade level. The ratings of the two Program teachers were pooled and comparisons were made of the first and second ratings in terms of three qualitative categories: (1) no change in rating between the beginning and the end of the year; (2) change in rating: "negative" direction; (3) change in rating: "positive" direction. Likewise, the ratings of the four non-Program teachers at each grade level were pooled and changes in pairs of ratings recorded. Students for whom there was only one set of ratings, either beginning-of-year or end-of-year, were not included in the analysis. The Chi-square test for two independent samples was employed to determine whether the Program and Control groups were drawn from the same general pop-
ulation. A total of 66 Chi-square tests were made (6 grade levels x 11 ratings).

The procedure for pupil rating was for the teacher to compare the student being rated with all students of his own age. All items were rated on a five-point scale with A representing the best or highest adjustment and E representing the lowest. The items rated are:

I. Overall Emotional Adjustment
II. Social Maturity
III. Tendency Toward Depression
IV. Tendency Toward Aggressive Behavior
V. Extroversion—Introversion
VI. Emotional Security
VII. Motor Control and Stability
VIII. Impulsiveness
IX. Emotional Irritability
X. School Achievement
XI. School Conduct

Table V summarizes all of the Chi-square tests made.

TABLE V

Chi-square Values by Grade Level and Rating for Social and Emotional Adjustment; Program vs. Control Groups; Pre- vs. Post-Program Ratings

<table>
<thead>
<tr>
<th>Rating No.</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>2.86</td>
</tr>
<tr>
<td>II</td>
<td>1.31</td>
</tr>
<tr>
<td>III</td>
<td>1.29</td>
</tr>
<tr>
<td>IV</td>
<td>5.17*</td>
</tr>
<tr>
<td>V</td>
<td>3.67</td>
</tr>
<tr>
<td>VI</td>
<td>0.59</td>
</tr>
<tr>
<td>VII</td>
<td>0.04</td>
</tr>
<tr>
<td>VIII</td>
<td>2.85</td>
</tr>
<tr>
<td>IX</td>
<td>1.59</td>
</tr>
<tr>
<td>X</td>
<td>9.78***</td>
</tr>
<tr>
<td>XI</td>
<td>3.75</td>
</tr>
</tbody>
</table>

N:Program
16 39 47 45 49 46
N:Control
82 88 61 85 92 87

* p .10  ** p .05  *** p .01
Of the 66 Chi-square values obtained, three were at or beyond the 1 per cent level of confidence, five were at or beyond the 5 per cent level of confidence, and six were between the 5 and 10 per cent confidence levels. The significant results obtained are discussed in the following sections:

A. Overall Emotional Adjustment: Except for the sixth grade, changes in total emotional adequacy in meeting the daily problems of living as shown in school did not differ between Program students and Control students. The sixth grade data yielded a Chi-square value of 5.81. This value is significant at the 6 per cent level of confidence. Table VI shows the observed frequencies, expressed as percentages, in patterns of rating changes and indicates that the Program and Control ratings differed in favor of the Program with respect to both shifts to better or higher adjustment (Program) and shifts to lower adjustment (Control).

**TABLE VI**

<table>
<thead>
<tr>
<th>Student Group</th>
<th>N</th>
<th>Direction of Changes in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No change</td>
</tr>
<tr>
<td>Program</td>
<td>46</td>
<td>57</td>
</tr>
<tr>
<td>Control</td>
<td>87</td>
<td>66</td>
</tr>
</tbody>
</table>

The sixth grade is a critical point in the emotional development of students because it is the point at which the period of adolescence begins for many of them. It was therefore encouraging to find a significant shift toward more positive ratings by sixth-grade Program teachers as compared to sixth-grade Control teachers. This will probably make the transition from
elementary school to junior high school easier for the Program students.

B. Social Maturity: There were no differences in the ratings of Program and Control teachers at all grade levels with regard to the ability of their students to deal with social responsibilities appropriate to their age. Five of the six Chi-square values obtained were in the significance level range .04-.55. The grade 3 Chi-square value of 4.73 is significant at the 10 per cent level of confidence. Thus from these predominantly insignificant results we can only conclude that the patterns of changes in Program students do not differ from the patterns of changes among the Control students. Both samples were drawn from the same population. In terms of teacher ability to judge social maturity, it would seem that the Extended School Year Program has no effect on this characteristic.

The results obtained from the teacher ratings are inconsistent with comments made by persons outside of the Extended School Year Program who had occasion to visit both Program and non-Program classrooms. A common observation of these visitors was that the children in the Program appeared to be more socially mature and adept than those not in the Program. In particular, the visitors pointed to immediate acceptance of them by Program students as contrasted with much greater tension and self-consciousness toward them in non-Program classrooms.

C. Tendency Toward Depression: Chi-square values for this characteristic in all grades indicated clearly that the Program and Control samples were drawn from the same population. The patterns of teacher ratings of changes in their students on the tendency toward pervasive unhappiness were markedly similar.
Participation in the Extended School Year Program apparently didn't affect this characteristic in any fundamental manner.

D. Tendency Toward Aggressive Behavior: For the second grade the Chi-square value obtained was significant beyond the .05 per cent level of confidence. For grade 1 the Chi-square value of 5.17 was significant at the .06 per cent level of confidence. At both grade levels the direction of these significant changes in teacher ratings was toward the display by Program students of more aggressive behavior between the beginning and the end of the school year. Table VII shows the pattern of changes in ratings obtained.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Student Group</th>
<th>N</th>
<th>Direction of Change in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No change</td>
</tr>
<tr>
<td>1</td>
<td>Program</td>
<td>16</td>
<td>56</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>82</td>
<td>46</td>
</tr>
<tr>
<td>2</td>
<td>Program</td>
<td>39</td>
<td>49</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>88</td>
<td>55</td>
</tr>
</tbody>
</table>

Two opposed explanations for more aggressive behavior among the younger children are suggested. One is that the very rhythm and activities of the Program tend to suppress passivity and encourage aggression. The other is that younger children in particular cannot cope with a program as varied as this one. Increased aggressive behavior toward other children or adults or both is a consequence of an educational program that is very active in the intellectual, emotional, and physical spheres.
E. Extroversion-Introversion: The patterns of changes in teacher ratings in grade 3 indicate that the two samples of students, Program and Control, are not drawn from the same population. The obtained Chi-square value of 8.97 is significant beyond the 2 per cent level of confidence. Table VIII indicates that the shift during the school year was toward greater extroversion on the part of the Program students.

| TABLE VIII |
| Per Cent Frequency of Changes in Ratings of Grade 3 Teachers on Student Extroversion-Introversion; Beginning-of-year vs. End-of-year |

<table>
<thead>
<tr>
<th>Student Group</th>
<th>N</th>
<th>Direction of Change in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>No Change Introverted Extroverted</td>
</tr>
<tr>
<td>Program</td>
<td>47</td>
<td>15</td>
</tr>
<tr>
<td>Control</td>
<td>61</td>
<td>64</td>
</tr>
</tbody>
</table>

F. Emotional Security: In general, teachers of the Program and Control students changed in their judgments of students with respect to the feeling of being accepted by and friendly toward their environment and the people in it in much the same manner. The patterns of shifts in ratings on this characteristic between the beginning and the end of the school year are quite similar at each grade level in both student groups. The third grade level, again, had a shift toward more emotional security. But, the obtained Chi-square value of 5.18 did not quite reach the acceptable 5 per cent level of confidence. The shift in grade 3 ratings is summarized in Table IX.
G. Motor Control and Stability: The residencies of the Extended School Year Program contained much instruction that falls within the psychomotor domain. Art, music, dance, and dramatics were the chief media for motor activities, both gross and fine. Did these instructional activities have sufficient impact on motor activity so that the judgments of teachers would be affected? The data of Table V indicate that significant shifts toward a greater capacity for effective coordination and control of motor activity of the entire body occurred in grades 3 and 5.

Table X summarizes the contingency tables upon which the significant Chi-square values were obtained.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Student Group</th>
<th>N</th>
<th>Direction of Change in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Change</td>
</tr>
<tr>
<td>3</td>
<td>Program</td>
<td>47</td>
<td>43</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>61</td>
<td>69</td>
</tr>
<tr>
<td>5</td>
<td>Program</td>
<td>49</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>92</td>
<td>63</td>
</tr>
</tbody>
</table>
H. Impulsiveness. Table V indicates that statistically significant differences were obtained for grades 3 and 4 on shifts in the Extended School Year students toward greater stability in mood. Table XI shows the distribution of the shifts in teacher ratings on this characteristic for the Extended School Year Program students and for students in the comparison sample.

**TABLE XI**

Per Cent Frequency of Changes in Ratings of Grades 3 & 4 Teachers on Impulsiveness; Beginning-of-year vs. End-of-year

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Student Group</th>
<th>N</th>
<th>Direction of Change in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No change</td>
</tr>
<tr>
<td>3</td>
<td>Program</td>
<td>47</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>61</td>
<td>62</td>
</tr>
<tr>
<td>4</td>
<td>Program</td>
<td>46</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>85</td>
<td>38</td>
</tr>
</tbody>
</table>

I. Emotional Irritability. Table V indicates that at no grade level were there statistically significant differences on shifts in the Extended School Year students toward less anger, less irritation, and less upset. Students not in the Program changed just as much on this characteristic as students in the Program.

J. School Achievement. If we were to expect increases in achievement test performance significantly greater for Program students than for comparison (non-Program) students, we should expect that Program teachers make significantly more shifts in evaluating their students' competency in school subjects than non-Program students. Table V indicates that this situation occurred at only one grade level -- the first grade. The obtained Chi-square value of
9.78 is significant beyond the 1 per cent level of confidence. The values obtained for the other five grade levels indicate that the rating patterns of both groups of teachers are markedly similar. The significance of the grade 1 situation turns out, upon inspection of Table XII to be in the direction opposite to the one expected. Shifts in rating toward improved school achievement were more pronounced in the Control than in the Program group. The proportions of students whose school achievement ratings remained the same over the school year were quite similar for both groups — approximately 40 per cent. But in proportion, twice as many Control group students were given higher ratings on school achievement at the end of the year as were Program students — 39 per cent vs. 20 per cent.

TABLE XII

Per Cent Frequency of Changes in Ratings of Grade 1 Teachers on School Achievement; Beginning-of-year vs. End-of-year

<table>
<thead>
<tr>
<th>Student Group</th>
<th>N</th>
<th>No Change</th>
<th>Lower</th>
<th>Higher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program</td>
<td>46</td>
<td>37</td>
<td>43</td>
<td>20</td>
</tr>
<tr>
<td>Control</td>
<td>82</td>
<td>41</td>
<td>20</td>
<td>39</td>
</tr>
</tbody>
</table>

K. School Conduct. The final rating that teachers were asked to make was on the student's conduct in the classroom situation as evidence of his ability to accept the rules and regulations of the school community. The Chi-square values on all the last line of Table V indicate that of all the characteristics measured by the Pupil Rating Scale, the most pronounced changes in favor of the Program students occurred in their school conduct. Significant differences in rating shifts occurred for grades 3, 4, and 6. The details of
these shifts are presented in Table XIII. At each grade level a significantly larger number of Program students were given a higher rating in school conduct at the end of the year than were given at the beginning of the year.

TABLE XIII

Per Cent Frequency of Changes in Ratings of Grades 3, 4 & 6 Teachers on School Conduct; Beginning-of-year vs. End-of-year

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Student Group</th>
<th>N</th>
<th>Direction of Change in Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>No Change</td>
</tr>
<tr>
<td>3</td>
<td>Program</td>
<td>47</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>61</td>
<td>59</td>
</tr>
<tr>
<td>4</td>
<td>Program</td>
<td>46</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>85</td>
<td>58</td>
</tr>
<tr>
<td>6</td>
<td>Program</td>
<td>46</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>87</td>
<td>71</td>
</tr>
</tbody>
</table>

The overall impression of the data obtained for student social and emotional adjustment is that the Rating Scale for Pupil Adjustment did not reveal as much change in the affective characteristics of the Extended School Year Program students as had been hoped for. When there had been changes in the adjustment of Program students, it had often occurred also in the Control students. Significant results obtained in favor of the Program students were spotty and were heavily concentrated at grade level 3. The only significant finding, although not an unsubstantial one, is that the greatest amount of change in Program students, as compared to Control students, was in ratings on school conduct.
4. Teacher Judgments of Effects on Students

A separate one-hour interview was conducted with each Program teacher during the last two weeks of the Extended School Year. The purpose of the interview was to collect opinions and judgments of the teachers regarding the overall value of the two major components of the Program -- the periodic holiday and the residency -- for both themselves and for their students. It was a semi-structured interview with an emphasis on taking a broad retrospective view of the school year that was then in its final weeks. The teachers had already had the opportunity to meet in groups throughout the academic year to evaluate particular residencies. In this final interview the ideas of the periodic holiday and of the residency were explored and discussed, at times even debated in an attempt to have the teacher justify her views.

In this section the data obtained on effects on students will be presented. The teachers' opinions and judgments on effects on themselves will be summarized in a subsequent chapter of this report.

a. Effects of the residencies on the students: All 12 teachers readily pointed to a variety of ways in which their students benefited from the residencies. The benefits reported fall into three broad categories: (a) cognitive benefits; (b) attitudinal and interest benefits; and (c) social-emotional benefits.

1) Cognitive benefits: An observation shared independently by all 12 teachers was that the residencies served to extend the language and thought of the students. They reported more verbal behavior in their classrooms, a general increase in vocabulary, and a greater facility with language.

Related to this was the report by all 12 teachers of an extension of the information and knowledge base of their students. Teachers reported that
their students retained and used much of the wide range of basic information that was acquired, directly and indirectly, during the residencies.

A fourth grade teacher observed that "these experiences increased their opportunities for putting things together, for seeing relationships." She saw such thinking in patterns and relationships increase in her classroom.

A second grade teacher summed up the cognitive benefits to her students in this way: "The residencies gave the children the opportunity to think, to process information, to make judgments about people, plans, and ideas."

Several teachers pointed out that a particular benefit for some of the students was to learn that they possess aptitudes and talents that heretofore had not been identified. This was both a benefit to cognitive learning and to self-esteem.

A first grade teacher was convinced that in her classroom there was a direct connection between the residencies and an increase in the amount of creative and original work done by her students. Her classroom was an "open" one and she was impressed with ideas brought back to the classroom which served as the basis for self-initiated projects and activities.

The art teacher at Chambers School reported that conversations in her art class for Program students were very definitely extended and deepened as a direct result of the museum residencies. There was also new kinds of talk. For example, about numbering prints in series, about museum accessioning methods, and about specific holdings in the collections. She also asserted that Program students were more independent with ideas and with modes of expression. They were more adventurous, less afraid to try things. The older the children, the more benefits they derived from the residencies.
2) Attitudinal and interest benefits: Six of the 12 teachers reported new interests in academic and intellectual matters developed in approximately one-quarter to one-third of their students. The assistant school librarian confirmed this in reporting that there was a definite shift among Program students away from riddle and joke books and books on cars, trains, and sports toward art books, craft (how to) books of all types, and health books. This shift was most pronounced in the middle grade levels.

All teachers reported a greater interest by students in school and a more positive attitude toward it. This was reflected in a variety of specific ways. Students were more willing to accept more responsibility. Tardiness and absence were drastically reduced. The school nurse reported the definite impression that Program students did not avail themselves of "sick call" in as nearly the same proportions as students not in the Program. She pointed out that going to see the nurse on a physical complaint is a way of getting out of class for at least a half hour. Unfortunately, the nurse's hunch could not be verified empirically because the medical records of the school district contain only those contacts with the school nurse that required specific medical attention. The visits of "malingers" are not recorded.

3) Social-emotional benefits: All teachers contend that the Program students, as a result of the residencies have become more adaptable to new situations. This was confirmed in conversations with the few substitute teachers who had occasion to teach in both Program and non-Program classrooms at Chambers School. They reported that there was much less fuss when they appeared in Program classrooms. A fourth grade teacher observed that her students "learned a great deal about people -- about types of people they had never encountered before, about
people with a variety of styles. This inevitably had an effect on their own social behavior." A first grade teacher in much the same vein stated that her students "were more comfortable with adults; they accept and interact with adults with absolute ease."

The same fourth grade teacher reported that as the year progressed her students became less dependent upon her. In a very positive manner they became more assertive in learning situations, and for the very first time several showed evidence of self-directed behavior."

A fifth grade teacher saw more positive social interactions in her classroom. "There was more of a sense of the class as a group and of shared purpose and mutual help."

In summary, there was a definite consensus among the Program teachers that the students derived a variety of specific benefits from the residencies. When pressed in the interviews to suggest costs paid by the students for the residencies, all were hard put to even think of a negative effect.

b. Effects of the periodic one-week vacations on the students: The most common observation that the teachers made about the periodic holiday was that the students were eager to return to school. One week away seemed to have been sufficient time to refresh the children yet not enough time to cause them to be reluctant to return to school, to have erased school from their consciousness.

A majority of the teachers were convinced that the recesses were directly responsible for an improved social and learning climate in their classrooms. They were particularly impressed with the absence of tension in their classrooms during the periods in which tension normally develops, such as immediately before the Christmas and Easter vacations and in the hot weeks of late May and early
June. A third grade teacher said: "Last year the last weeks of the school year were exhausting. They were wasted weeks. This year academic work continued without interruption not only through the last weeks of the regular school year but through the final weeks of the extended school year." A second grade teacher added: "In the spring my students were not tired or bored as my students had been under a conventional nine month school calendar." A second grade teacher observed: "They were always glad to go on a recess. There were no problems on their return, no adjustments to make. And they showed no reluctance to attend school in the summer."

The five weeks of school in the summer and the smooth way in which they went following the last one-week vacation was a continual source of wonder to the Program teachers. They just couldn't believe that they did not have a rebellion on their hands. Of course, they had made careful arrangements to offset possible summer doldrum by arranging for one hour of swimming instruction each day for all Program students at an outdoor public swimming pool located about 1000 feet away from the Chambers School building. But the consensus among them was that the periodic short holidays was the crucial factor that made the difference during the post-school year summer weeks. A third grade teacher observed: "The children have shown absolutely no unhappiness over going to school in the summer. Some have even commented that they would like to continue."

A major unanticipated benefit of the recesses was that they afforded the teachers the opportunity to have selected students in for tutoring and for small group instruction. Teachers who did this reported that all students accepted the invitations willingly.
Another unanticipated benefit was that one entire recess was organized by the East Cleveland YMCA as a way of introducing the Y to children who were not acquainted with its facilities and programs. Two weeks before that particular recess the Y sent all students in the Program an invitation to spend the forthcoming week-long holiday at the Y. Buses would receive them in the morning at Chambers School and bring them back at mid-afternoon. A daily program of activities had been arranged by the staff of the Y. The student response was most impressive. Acceptances were received by the Y from 80 per cent of the 293 students then in the Program. The daily attendance at the Y was quite close to this figure despite the fact that week the thermometer recorded below freezing temperatures and snow was on the ground.

5. Parent Judgments of Effects on Students

In February, 36 parents, randomly selected and representing approximately 25 per cent of the families in the Program, were interviewed about the Extended School Year Program. One of the questions asked of them was: "What changes do you see in the Extended School Year Program?" This was an open-end question. The parents were not provided with any alternatives to react to or with any verbal cues. Table XIV summarizes the responses to this question and indicates the proportion of the 36 parents mentioning the change in behavior that was observed in their children at home.
TABLE XIV

Mid-Year Parent Reports on Changes in Behavior of Their Children Observed at Home (Per cent)

<table>
<thead>
<tr>
<th>Type of Behavior Change</th>
<th>Per cent Parents Reporting the Behavior Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in talk (general)</td>
<td>84</td>
</tr>
<tr>
<td>Increase in intellectual talk among siblings</td>
<td>31</td>
</tr>
<tr>
<td>Talk with enthusiasm about what was seen &amp; learned in residencies</td>
<td>89</td>
</tr>
<tr>
<td>More Reading</td>
<td>36</td>
</tr>
<tr>
<td>New interests (less interest in TV &amp; in playing on the street)</td>
<td>28</td>
</tr>
<tr>
<td>Greater interest in school; more reluctant to stay home</td>
<td>78</td>
</tr>
<tr>
<td>Increase in self-initiated activities</td>
<td>39</td>
</tr>
<tr>
<td>Increased sensitivity to surroundings</td>
<td>11</td>
</tr>
<tr>
<td>More mature</td>
<td>33</td>
</tr>
<tr>
<td>More alert</td>
<td>44</td>
</tr>
</tbody>
</table>

The data of Table XIV indicates that parents were able, quite easily, to pinpoint specific changes and on the average each was able to mention almost five visible changes in their children. The major sectors of change were in verbal behavior and in interest in school.

In May, 1972, a 19-item structured questionnaire was sent to all Program parents. Five of the statements dealt directly with their children. They were:

7. It is hard for my child to stay out of trouble at school.
13. My child is doing better in school this year than last year.
14. My child is more interested in doing well in school this year.
15. My child feels that school is a waste of time.
16. My child likes school better this year.

Response alternatives to the statements were of the "Yes" or "No" type. Forms were returned for 70 per cent of the students in the Program. This was a very high proportion of returns for a questionnaire and reflects the great interest parents displayed toward the Program.
TABLE XV
Parent Responses to Statements Concerning Their Children and School (Per cent)

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Per Cent &quot;Yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cannot stay out of trouble at school</td>
<td>07</td>
</tr>
<tr>
<td>Doing better in school this year than last year</td>
<td>82</td>
</tr>
<tr>
<td>More interested in doing well in school this year</td>
<td>97</td>
</tr>
<tr>
<td>Child feels school is a waste of time</td>
<td>12</td>
</tr>
<tr>
<td>Likes school better this year</td>
<td>93</td>
</tr>
</tbody>
</table>

The information conveyed in Table XV suggests that there is a very broad positive consensus among parents of children in the Program. The basis of this consensus is that their children have more positive affect toward school this year than in previous years. The very high proportion of agreement among parents on each of the five statements of Table XV indicates that there is more than social acquiescence at work in their perceptions of and attitudes toward the Extended School Year Program.

6. Students Speak and Write About the Program.

No summary of effects of an educational program upon students is complete without having the students themselves indicate their opinions. In the last week of the Program teachers taped retrospective discussions about the Program or asked their students to write about their impressions of the Program.

What do students focus upon when thinking about the Program? The umbrella term used to express their sentiments and feelings is: "It was fun."
"Fun means it was pleasurable, they looked forward to it, and they looked back at it with satisfaction. Much student writing and speaking described the program as "fun." Yet rare is the statement that simply speaks of satisfaction. The satisfaction is based on specific needs. A fifth grade boy speaks of fun and of being part of an "in" thing:

"The reason why I like to attend the extended school year is because it's fun and we get to go places that no other child has been and we have seen things at places like the Health Museum, Science Museum and Karamu House. We had a lot of fun at every place we went to. That's why I like the extended school year."

The feeling of being a member of a special group involved in activities unique to this group is widespread. This engendered a feeling of pride, reflected in this politically-astute statement:

"The reason I like the extended school year was the people who helped to bring us into it was the Board of Education. They picked our school to be the first school to ever go on extended visits and explore the Health Museum and all the new parts of its building. They picked our school because we had the best principal, the best teachers and the smartest students."

Another student reflected the sentiment of many when he said:

"I like the program because we could go to lots of places the other people (students) can't. Some people would like to be in the Program. I think the extended school year is wonderful because you could get to lots of places that other people cannot go to."

The "we are an in-group" feeling was clearly displayed in the activities that seem more dramatic to children, such as going to overnight camp and their exclusive use of the public swimming pool during designated periods in the summer weeks.

What specifically did the students feel that they learned? For inner-city children the residency at the Health Museum was a particular focus of their recall. Examples are:
"I have learned what dope and alcohol can do to you and if take it you can die from it. Everybody knows if they take it they're going to die."

"A lady took us into a room where she showed us particles of blood and sickle cell anemia through a microscope. I thought you could drink as much alcohol as you want and all that would happen is that you'd get real sleepy and crazy. But if you drink one quart of alcohol you're dead."

"I liked being a student at the Health Museum because I learned how babies are born and about fertility and reproduction."

"We learned a lot at the Health Museum about sex. We learned about helping people and we learned how people are, like how they can be retarded and why."

Learning was not defined exclusively in terms of acquisition of new knowledge and concepts. Much positive talk was about greater freedom at the cooperating cultural institutions and about particular instructors with teaching styles which differed from those the students had experienced in their public school classrooms:

"I like the extended school year because I liked Mr. Simms and the other teachers at Karamu. We'd be doin' all different kinds of art with Mr. Simms. And it was better doin' art at Karamu than here 'cause he let the record player play and we could get the tables dirty. We won't really get in trouble. And in dance we would be rollin' down on the floor and skippin' and dancin' and turnin' around."

Some students saw the Program as a way of being occupied and freed of experiencing the hazards of street living during the long summer holidays. Here is a statement reflecting this type of perception:

"As long as you stay out of school, that's the much as you is going to get in trouble. If you're playing around with a rock, you may bust a window. But when you're in school you can't bust a window 'cause you don't have no rock to pick up."

Other statements in the same vein are:

"I think it's nice to be in school 'cause you don't have hardly nothing to do at home except running around in the streets."
"I think it's best to be in school so you can stay out of trouble. Anyway it's fair because everybody got weeks out of school while everybody else was in school."

"I agree with Lois about staying school through July because all the people in the street is getting in more trouble."

Benefits to parents are recognized by the students:

"I think it was convenient to my mother and father because in the summer time they have to go to work and I don't have to be home. And you know they don't like us to be home by ourselves because people come around and everything. So it's best to be in school."

But adult views are hardly monolithic. The following statement reveals a type of adult sentiment not often recognized by educators:

"My mother tells her friends we're in the Program and when she tells them what we do, they say if it comes to their school they won't put their children in it because they want to go to their grandmother's house or out of town. They say it's just a waste of time to be in school."

The feelings of many of the students were summed up in a poem written by a fourth grade student:

"The Extended school year is what it's all about. We be in school sometimes and at other times out. I like it because we have so much fun. And we get to swim under the sun. I like going places instead of sitting in school. The extended school year is really cool.

I really liked the art museum. We saw many interesting things and at Karamu we go to sing. And at camp we really got to do our thing!!!

And of the rest I really like Mr. Armon the best. And if I could I would do it again. I really hope I can!!!"

Sleep-in camp was, of course, one of the major highlights of the Program. Here are some of the poetical evocations:

"Bunk. Big bunk Laughing and telling jokes Happy, sad, playful and stupid."
"Red Raider
Red Raider is fun
While sitting in the sun
And looking at the horses
And watching water."

"Counselor
Charles is jive
And is still jiv- ing around.
Linda has jonged
And I can't believe she's not jinging now."

"Camp I like. Camp is fun and exciting.
Camp makes me feel free and is hiking through the woods.
And sleeping in the bunks,
And getting out of bed in the morning,
And getting ready for breakfast,
And doing art and going on hayrides.
Running and jumping and falling.
And taking showers and going on a very long
Hike to Hemlock Stream.
And stopping to rest on logs.
That's why I like camp."

Teachers were asked to include, in the class discussion, the question,
"What did you not like about the extended school year? With the posing of
this question almost all attention focused on the periodic holidays, not the
residencies. The comments reflected ambivalence about the holidays. Naturally,
the students were not sufficiently sophis- cated to see the tradeoff in abstract
terms or to recognize what their teachers and parents were reporting, namely,
less tense students. Having short periodic vacations throughout the school year,
they somehow, in late July, forgot about those holidays. They spoke as though
they were not receiving their summer due. Some of it was illogical as re-
lected in this comment in which the student displayed an inability to conserve
time:

"We missed half of our vacation."
(Teacher: Didn't you get half your vacation during the year?)
"I mean we only get one month of vacation."
(Teacher: You got the same amount of vacation, just spread out."
Another comment of the "have your cake and eat it too" variety:

"I like the extended school year but the only thing I don't like is we be having fun in the middle of the year but at the end of the year we have to stay in school while the other people get to run around and play."

7. Scholastic Achievement of Students

Preface

While the above reported findings that the "Enriched and Extended School Year" Program has yielded considerable attitudinal and behavioral change among the participating students would indeed per se justify the program, the East Cleveland Board of Education was integrally concerned with what effect this program would have on student achievement, as measured by standardized, objective tests of scholastic achievement. Consequently, with the reader's indulgence, the program's effects on student achievement will be examined at length in this section of the report. Before proceeding to these data, however, a brief discussion of the logic and assessment paradigm to be used in evaluating the program's effects on academic achievement is in order.

Evaluation Philosophy

It is a fact that prior to institution of the present program, East Cleveland children were following the same achievement pattern as the majority of urban educated children. That is, the East Cleveland students achieved below national norms, and their achievement deficit increased with years of schooling. These facts are graphically portrayed in Table XVI.
TABLE XVI

Stanford Achievement Battery Median Scores
For The East Cleveland Pupils
Fall 1970 Compared To Expected Norms

<table>
<thead>
<tr>
<th>Grades</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norm</td>
<td>2.1</td>
<td>3.1</td>
<td>4.1</td>
<td>5.1</td>
<td>6.1</td>
</tr>
<tr>
<td>Local Means</td>
<td>1.8</td>
<td>2.4</td>
<td>3.1</td>
<td>3.7</td>
<td>4.5</td>
</tr>
<tr>
<td>Achievement Deficiency (Years)</td>
<td>.3</td>
<td>.7</td>
<td>1.0</td>
<td>1.4</td>
<td>1.6</td>
</tr>
</tbody>
</table>

As Table XVI reveals, in the fall of 1970, prior to the initiation of the present program, East Cleveland students were scoring consistently below the national norms grade level expectancies on the standardized achievement battery. Table XVI further reveals that these students' degree of educational deficit appears to linear, in that it tends to increase each year by approximately three months. As Table XVI reveals, the rate of growth in achievement for East Cleveland pupils was seven months of achievement for each year of chronological development. It should be noted that this learning rate of East Cleveland students does follow the trends evident in other urban educational systems where the average yearly growth in achievement falls somewhere between six and seven months for every twelve months of chronological age increase.

In setting about to evaluate the effects of the "Enriched and Extended School Year" Program, the evaluative staff was not so presumptuous as to assume that one year's participation in this program would suddenly "boost"
student achievement up to or above national norms. Rather, the evaluative staff asked a number of critical and thoughtful questions which have come to serve as the three major measurements in the assessment paradigm used to evaluate the program's effects on student scholastic achievement. Specifically, these questions are:

1. To what extent does student achievement approximate national grade level norms?

2. To what extent do achievement scores increase over the local grade level norms described in the base line data (See Table XVI).

3. To what extent does the learning rate change for a given year of chronological development over the seven month local standard?

The achievement data which follows concerns itself with each of these three questions, and does so specifically in terms of each individual grade, 2 through 6. At each grade level, mean achievement test scores of the "Enriched and Extended School Year" students are compared with those of:

(1) a control group of non-project students at the same elementary school,
(2) a control group of non-project students randomly selected from a different but demographically similar East Cleveland elementary school, East Cleveland, (3) a control group made up of the total East Cleveland elementary school population for the particular grade under consideration, and (4) the national norms.

Before proceeding to these data, one very important consideration should be noted. All test results indicate Stanford Achievement Test scores administered in May, 1972, for the project participants as well as for the four comparison groups. For these four comparison groups, May indicates the latter part of their year of formal academic schooling.
That is, these students have had eight months of school as of May. In the case of the project participants, however, these students have too been attending school since September but have had approximately five weeks of residencies at the cooperating cultural institutions as well as weeks of scheduled vacation periods. That is, as of May, the project participants had had in fact a less amount of time of formal academic schooling than had students in the four comparison groups. Perhaps a "fairer" comparison might have been to test the project participants in July of 1972, at the close of their formal school year.

Achievement Results

TABLE XVII

Stanford Achievement Test Mean Scores
For Various Groups Administered In May, 1972,
For Grade Two

<table>
<thead>
<tr>
<th>Project Participants</th>
<th>Word Reading</th>
<th>Paragraph Meaning</th>
<th>Vocabulary</th>
<th>Spelling</th>
<th>Word Study Skills</th>
<th>Battery Media</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>2.5</td>
<td>2.4</td>
<td>2.7</td>
<td>2.4</td>
<td>2.9</td>
<td>2.6</td>
</tr>
<tr>
<td>Control I, Same Schools</td>
<td>2.5</td>
<td>2.5</td>
<td>2.3</td>
<td>2.7</td>
<td>3.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Control II, Different Schools</td>
<td>2.2</td>
<td>2.1</td>
<td>2.2</td>
<td>2.3</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td>Total System</td>
<td>2.4</td>
<td>2.4</td>
<td>2.4</td>
<td>2.6</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>National Norm</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
<td>2.9</td>
</tr>
</tbody>
</table>
By observation of Table XVII it is rather apparent that the second grade project participants (Group I) achieved below the national norms (Group V) on every sub-test but one, i.e., Word Study Skills. In contrast with the base list data, children at the beginning of grade two were three months below the appropriate achievement level. At nearly the end of second grade, nine months later, this deficit had not increased as projected. In fact, the battery median of 2.6 at the conclusion of second grade is two months higher than the obtained mean score of 2.4 for beginning third grade. It appears warranted, therefore, to conclude that there has been improvement in the grade level mean even though not sufficient to claim grade level equivalence.

Comparing the project participants with non-project students yields the following conclusions: Project and non-project students (Group II) from the same school cannot be said to differ in achievement in that their battery median scores were both 2.6. Both groups were achieving at about the same level even though there appeared to be some variations in their sub-test means. By contrasting Group I with a control group from another school (Group III) and the total population of second grade students (Group IV), a slight difference in achievement levels resulted. The project students tended to average three months greater achievement compared with Group III and one month improvement with Group IV. For all practical purposes, therefore, it would be but to conclude that there was a slight improvement in achievement of project participants in comparison with other children in the system at the second grade and that this increment represents .1 or one month of achievement as measured by the SAT.
TABLE XVIII
Stanford Achievement Test Mean Scores
For Various Groups For Grade Three
Administered In May, 1972

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>3.4</td>
<td>3.1</td>
<td>3.3</td>
<td>3.5</td>
<td>3.4</td>
<td>2.9</td>
<td>3.7</td>
<td>3.0</td>
<td>3.3</td>
</tr>
<tr>
<td>Group II</td>
<td>3.1</td>
<td>2.9</td>
<td>3.2</td>
<td>3.4</td>
<td>3.3</td>
<td>2.8</td>
<td>3.6</td>
<td>2.9</td>
<td>3.2</td>
</tr>
<tr>
<td>Group III</td>
<td>3.0</td>
<td>2.8</td>
<td>2.9</td>
<td>3.1</td>
<td>3.0</td>
<td>2.7</td>
<td>2.9</td>
<td>2.7</td>
<td>2.9</td>
</tr>
<tr>
<td>Group IV</td>
<td>3.2</td>
<td>3.0</td>
<td>3.1</td>
<td>3.4</td>
<td>3.4</td>
<td>3.0</td>
<td>3.2</td>
<td>3.0</td>
<td>3.2</td>
</tr>
<tr>
<td>Group V</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
<td>3.9</td>
</tr>
</tbody>
</table>

Comparing project students with appropriate grade level placement on Table XVIII, e.g. comparing groups I and V, project participants fail to achieve at their grade level equivalent by nearly an average of six months for each of the sub-tests. Even though the participants are still consistently below grade level norms, can any evidence be supplied to indicate improvement? In response to this question, the deficit between the norm and the attained levels is six months. Following the norm devised
from the base line data by the end of grade three, that deficit should be expected to be about nine months. If this were the case, there would be about a 33 percent general improvement in the overall achievement level between the time when base line data was collected and the appropriate grade level norms. Furthermore, the mean achievement level for beginning fourth grade in the fall of 1970 was 3.1 or two months lower than that obtained at the end of grade three. To prevent one from becoming overly optimistic, however, there needs to be further comparisons with the other groups of students in the system to determine to what this improvement can be attributed. The trend is similar with that which occurred at grade two. At most, one would conclude about one month's increase occurred in achievement level in comparison with other third grade groups for each of the eight sub-tests.

TABLE XIX
Stanford Achievement Test Means Scores
For Various Groups Of Fourth Grade Students
Administered In May, 1972

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>4.3</td>
<td>3.9</td>
<td>4.4</td>
<td>4.3</td>
<td>4.3</td>
<td>4.2</td>
<td>4.3</td>
<td>4.3</td>
<td>4.3</td>
<td>4.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Group II</td>
<td>3.6</td>
<td>3.3</td>
<td>3.8</td>
<td>3.2</td>
<td>3.1</td>
<td>3.6</td>
<td>3.4</td>
<td>3.7</td>
<td>3.8</td>
<td>3.7</td>
<td>3.5</td>
</tr>
<tr>
<td>Group III</td>
<td>4.0</td>
<td>3.4</td>
<td>3.7</td>
<td>3.4</td>
<td>3.2</td>
<td>4.0</td>
<td>3.3</td>
<td>3.6</td>
<td>3.7</td>
<td>3.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Group IV</td>
<td>4.0</td>
<td>3.7</td>
<td>4.2</td>
<td>3.6</td>
<td>3.6</td>
<td>3.9</td>
<td>3.8</td>
<td>3.9</td>
<td>4.0</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Group V</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
<td>4.9</td>
</tr>
</tbody>
</table>
Table XIX describes the achievement means for the SAT administered in May 1972, for the same groups examined previously in the achievement comparisons. The achieved means for each sub-test by the project participants again is below the expected grade level norm. The deficit at the end of grade four is six months the same as it was at grade three. If seven months represents the local norm of expected achievement growth each year, a predicted deficit at the end of grade four would be about twelve months, which converted to the appropriate grade level would be about 3.8 or 3.9. This six-month decrease in achievement deficit for the project participants represents a 50 percent improvement in the overall deficit. Furthermore, it indicates that project participants are achieving at the end of grade four about six months higher on the SAT in each of the sub-tests in comparison with the mean averages of fifth grade students at the beginning of grade five, when the base line norms were established in the fall of 1970.

When the achievement of project participants is compared with groups II, III, and IV at grade four, a considerable difference is noted. Unlike grades two and three, here, at grade four a four-month difference in grade level means occurs over the ten SAT sub-tests in favor of project participants. The differences increase to seven months in comparison with the control group from a school different but similar to the project school, and even increases to eight months with a control group with the same school. The control groups used to compare the project pupils follow the achievement pattern referred to in the discussion related to base line data.
They achieved at or a little below the predicted level of seven months achievement growth for each year of education. Project students at grade four have made a notable departure from the pattern which characterizes the system and have shown a strong effort to move toward national norms. In fact, the project participants definitely have demonstrated that it is possible to reduce or even overcome the increasing deficit in performance with continued educational experience.

**TABLE XX**

Stanford Achievement Test: Means for Various Groups of Fifth Grade Students

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>4.5</td>
<td>4.6</td>
<td>5.1</td>
<td>4.5</td>
<td>4.0</td>
<td>5.2</td>
<td>4.5</td>
<td>4.6</td>
<td>4.9</td>
<td>4.7</td>
<td>4.7</td>
</tr>
<tr>
<td>II</td>
<td>4.2</td>
<td>4.1</td>
<td>4.6</td>
<td>4.3</td>
<td>3.9</td>
<td>4.6</td>
<td>4.2</td>
<td>4.0</td>
<td>4.7</td>
<td>4.3</td>
<td>4.3</td>
</tr>
<tr>
<td>III</td>
<td>4.2</td>
<td>3.8</td>
<td>4.2</td>
<td>3.7</td>
<td>3.3</td>
<td>3.9</td>
<td>3.7</td>
<td>4.1</td>
<td>4.1</td>
<td>3.9</td>
<td>3.9</td>
</tr>
<tr>
<td>IV</td>
<td>4.5</td>
<td>4.3</td>
<td>4.7</td>
<td>4.2</td>
<td>4.0</td>
<td>4.6</td>
<td>4.4</td>
<td>4.2</td>
<td>4.6</td>
<td>4.4</td>
<td>4.4</td>
</tr>
<tr>
<td>V</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
<td>5.9</td>
</tr>
</tbody>
</table>
At grade five, the achievement performance of project participants continues to show exciting results. Table XX summarizes the achievement means for the SAT for the same groups as previously described for the May testing in 1972. Comparing group I, project participants with group V, which represents the appropriate achievement norm, it is obvious that the children fail to attain achievement scores with the desired norm. The difference at the end of grade five of twelve months in overall achievement is quite large, larger than at any previous grade levels. It is, however, above the stated local norm which in this case would be about fifteen months. The 20 percent improvement over this fifteen month deficit figure is the least impressive of any grade examined, but it does continue the trend to continuously reduce the predicted achievement deficit of three months for each year of educational exposure. It also represents an achievement level higher by two months than that obtained in the base line data for beginning sixth grade students during the fall of 1970 testing program.

Comparing performance of project participants with the total fifth grade, group IV, a notable difference in achievement again occurs in favor of project participants. Group I excelled group IV in overall achievement by three months. In comparison with a control group in a different school, the difference between groups increased to eight months, while a difference of four months resulted with the control group from the same school.

The control groups achieve more according to the predicted pattern of seven months for each year of school, whereas the children in the project once again improved upon the pattern.
TABLE XXI
Stanford Achievement Test Mean Scores
For Various Groups Of Sixth Grade Students
Administered May, 1972

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>5.6</td>
<td>5.9</td>
<td>6.4</td>
<td>5.6</td>
<td>6.3</td>
<td>6.3</td>
<td>6.1</td>
<td>6.0</td>
<td>5.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Group II</td>
<td>4.9</td>
<td>5.0</td>
<td>5.5</td>
<td>4.7</td>
<td>5.1</td>
<td>5.4</td>
<td>4.7</td>
<td>4.9</td>
<td>4.6</td>
<td>5.0</td>
</tr>
<tr>
<td>Group III</td>
<td>4.8</td>
<td>4.8</td>
<td>5.2</td>
<td>4.0</td>
<td>4.8</td>
<td>5.0</td>
<td>4.8</td>
<td>5.0</td>
<td>4.5</td>
<td>4.8</td>
</tr>
<tr>
<td>Group IV</td>
<td>5.3</td>
<td>5.2</td>
<td>5.7</td>
<td>4.8</td>
<td>5.1</td>
<td>5.5</td>
<td>5.2</td>
<td>5.1</td>
<td>5.0</td>
<td>5.2</td>
</tr>
<tr>
<td>Group V</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
<td>6.9</td>
</tr>
</tbody>
</table>

At grade six, the achievement results are described in Table XXI which compare mean achievement scores of each sub-test between project participants and the previously described control groups. Project participants fail to attain a level of performance commensurate with the grade level equivalence. The appropriate achievement level of 6.9 is lacking in nine months of achievement performance. At grade six this
deficit is below that of the fifth graders in the project who were twelve months below grade placement. What is significant here, however, is the difference between the predicted deficit and the attained. At the end of grade six, it was expected, based on local norms, that sixth grade students would be performing eighteen months below their grade level equivalence. To reduce this deficit by six months, i.e. 50 percent is highly impressive and very encouraging. It supports the beliefs that something can be done to combat the frustration of the ever increasing achievement deficit that characterizes urban schooling.

The real significance of the performance of project participants becomes most clear when compared with this year's performance. Note that group I excels group II, III, and IV by an average of ten months.

The impart of this evaluation of the East Cleveland project can best be comprehended when presented in a more compact description where the pertinent factors are summarized.

First, it can be stated with certainty that participants in the East Cleveland project fail to achieve up to grade level norms. At each and every grade, grades two through grades six, the children achieve below their appropriate grade level. On the other hand, the data presented in this report does provide evidence that the performance of project participants has departed from the stated norm for an urban black population with a high enrollment of poverty children and has affected a reduction in the overall deficit in achievement. At grade two children were three months below standard, six months at grade three, six months at grade four, twelve months at grade five, and nine months
at grade six. The accumulated total deficit totals thirty-six months for the five grades. Even though such a deficit leaves much to be desired by way of improvement, consider what it was when the base line data was established; i.e. three months for each year of instruction. All totaled that is the equivalent of sixty months of achievement deficit for the five grades. Participants in this project in one year affected a 40 percent reduction in that achievement deficit. Stated positive, there has been a 40 percent overall increase in the achievement performance of project participants.

Secondly, a very remarkable trend was uncovered by comparing the performance of project participants with various peer control groups within the system. Had no differences have occurred between the project and control groups, the above noted improvement in achievement could not be attributed to the project. But there were many differences. The project students excelled in achievement a control group within their own school by 0 months at grade two, one month at grade three, eight months at grade four, four months at grade five and ten months at grade six. The accumulated increase for the five grades totals twenty-three months. In comparison with a control group from another school, the project participants excelled them by three months at grade two, four months at grade three, seven months at grade four, eight months at grade five, and twelve months at grade six. The accumulated total for the five grades is thirty-four months of mean achievement. In comparison with the total elementary school population, the project students excelled them by one month in grade two, one month
at grade three, four months at grade four, three months at grade five, and eight months at grade six. This represents a total increment of seventeen months in achievement for the five years. Based upon the data there can be little doubt that project students excelled in achievement over their peers within the system. If we were to average these accumulated increments over the five years of education examined, they represent averages ranging from 3.4 months' to 6.8 months' differences between the compared groups of students. But as stated above, there is a notable trend evidenced here. Upon close examination of the differences on achievement level, the real significant differences occurred at the upper grade levels; i.e. grades four, five, and six.

The discussion of this report up to this point has been concerned with the examination of pupil achievement with respect to the degree or extent that they meet expected grade level norms. Because the children in the East Cleveland Project still fail to measure up to the typical suburban student in that they still achieve below grade level norms, the project may be judged by some to still be a failure. For that reason it is necessary to recall the basic premise stated in the beginning of this section. It was stated that the aim in East Cleveland to achieve at the same level of development as the "normal" suburban child, and that to expect more would be to impose an unfair comparison criteria upon the less fortunate in our society. Since all of the children participating in the East Cleveland program were children suffering from "urbanitise", all were below grade level equivalence at the beginning of the program.
Using the above stated premise, the criteria of evaluation should not depend solely upon whether one is at or below grade level expectancy, but also whether the rate of growth approximates what is "normal". The "normal" learning rate is one year achievement growth for one year of education as measured by one year of chronological growth. This brings us to the third achievement measurement, the examination of the change in learning rate occurring during a chronological year from the seven month local standard.

The premise upon which the East Cleveland program was founded was that a 20 percent increase in achievement over the seven month base was to be the desired outcome. Translated to grade level expectancy, that means over a period of one year the mean increment in achievement would correspond to an 8.4 months' growth on the SAT. Table XXII describes the SAT Battery Median mean scores for all East Cleveland pupils at each grade level and project participants based upon administration of the test in September 1971 and May 1972. The time difference between the two testing periods was eight months. By comparing the pre and post test results for all East Cleveland pupils for an eight month educational time period the achievement growth at grade two was seven months, six months at grade three, six months at grade four, and five months at grades five and six. In Table XXII Stanford Achievement Test Results with Battery Median means for all East Cleveland pupils are compared with Project pupils on their Pre and Post Test for the 1971-72 school year.
TABLE XXII

Stanford Achievement Test Results With Battery Median Means
For East Cleveland Pupils Compared With Project Pupils
On Their Pre And Post Test -- 1971-72 School Year

<table>
<thead>
<tr>
<th>Grade</th>
<th>Sept. Testing Both Groups</th>
<th>May Testing All Students</th>
<th>May Testing Project Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1.8</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>3</td>
<td>2.5</td>
<td>3.2</td>
<td>3.3</td>
</tr>
<tr>
<td>4</td>
<td>3.3</td>
<td>3.9</td>
<td>4.3</td>
</tr>
<tr>
<td>5</td>
<td>3.9</td>
<td>4.4</td>
<td>4.7</td>
</tr>
<tr>
<td>6</td>
<td>4.7</td>
<td>5.2</td>
<td>6.0</td>
</tr>
</tbody>
</table>

As Table XXII reveals, in each case this is below the standard of one month's growth for each month of instruction. On the other hand the project participants at every grade level attained a rate of growth equal to or in excess of one month's academic growth for one month's instruction. Projected over one year of growth this represents one year increase in achievement for a year of instruction. In comparison with seven month's growth for a chronological year the actual increase is 40 percent or twice predicted before the project began. In conclusion, participants in this project have changed significantly their learning pattern and, in fact, perform at a growth rate equal to the "normal" suburban child.
IV. EFFECTS ON TEACHERS

1. Teacher Attendance

As with student attendance, teacher attendance can also be a significant indicator of morale and interest. A high level of teacher absence, particularly for single days, may be construed as being a sign of low morale and fatigue, loss of interest and negative professional attitudes. Furthermore, a high teacher absence rate is detrimental to student learning. A consequence of regular teacher absence is a loss in the continuity of instruction. Finally, not the least negative consequence of a high teacher absence rate is its economic cost. Every day of absence costs the school district approximately $30.00 in substitute teacher pay.

Table XXIII summarizes the absence data for the twelve teachers in the Extended School Year Program from the beginning of the school year in early September, 1971 through July 21, 1972. The period reported includes both the five one-week special vacation periods, which were considered for the teachers to be periods of professional development and activity, and the five academic weeks of instruction subsequent to the end of the regular school year.

<table>
<thead>
<tr>
<th>Type of Absence</th>
<th>No. Days of Absence (12 teachers)</th>
<th>Average No. Days Absent per Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sick leave</td>
<td>29</td>
<td>2.4</td>
</tr>
<tr>
<td>Personal leave</td>
<td>7</td>
<td>0.6</td>
</tr>
<tr>
<td>Professional day off</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>All types of absence</td>
<td>37</td>
<td>3.1</td>
</tr>
</tbody>
</table>
Table XXIV presents a frequency distribution in terms of the number of days of sick leave by teachers.

**TABLE XXIV**

Frequency Distribution of Days of Sick Leave for Program Teachers for the Entire Extended School Year

<table>
<thead>
<tr>
<th>No. Days of Sick Leave</th>
<th>No. Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

The data of Tables XXIII and XXIV suggest that the absenteeism of the Program teachers was negligible, averaging three days per teacher for the eleven-month academic period under study. Two of the twelve teachers had a perfect attendance record in the Program and an additional four teachers took only one day of sick leave. These observations inevitably give rise to the legitimate question of whether the absence rates of non-Program teachers in the various elementary schools of the East Cleveland school district were any different quantitatively from that of the Program teachers. Table XXV has been assembled to throw light on this question. It shows the average number of days absent for teachers in each elementary school in the East Cleveland school district in the 1971-1972 school year. In preparing this table all types of absences were pooled to provide the average number of days absent per teacher.
TABLE XXV

1971-72 Per Teacher Absence Rate by Elementary School

<table>
<thead>
<tr>
<th>School</th>
<th>Average No. Days Absent per Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chambers--Program</td>
<td>3.1</td>
</tr>
<tr>
<td>Chambers--non-Program</td>
<td>8.7</td>
</tr>
<tr>
<td>Elementary School B</td>
<td>4.8</td>
</tr>
<tr>
<td>Elementary School C</td>
<td>8.3</td>
</tr>
<tr>
<td>Elementary School D</td>
<td>7.6</td>
</tr>
<tr>
<td>Elementary School E</td>
<td>5.4</td>
</tr>
<tr>
<td>Elementary School F</td>
<td>10.3</td>
</tr>
<tr>
<td>Total Elementary (non-Program)</td>
<td>7.7</td>
</tr>
</tbody>
</table>

The data of Table XXV indicates in quite clear terms that the absence rate of teachers in the Extended School Year Program was appreciably lower than the absence rates of teachers in all other elementary schools, singly and combined. Furthermore, the absence rate of teacher participants in the program shows a 66% decrease as compared to teachers not in the program over a nine month period.

2. Changes in Temperament and Personality: Results from the Administration of the Cattell Sixteen Personality Factor Test (16PF)

The original evaluation plan called for comparing changes in particular temperamental and personality dimensions of teachers in the Extended School Year Program with changes in non-Program teachers. Toward this end the Cattell Sixteen Personality Factor Test was administered at the beginning of the school year (September, 1971) to the twelve Program teachers and to twelve teachers at another East Cleveland elementary school. But at the end of the school year the teachers in the control group were unable to take the test again.
while the test was administered to Program teachers in late July, 1972.

Thus the analysis of the 16 PF data was based on data obtained from Program teachers only. Comparisons were made of responses to the test items in September, 1971 with responses made in July, 1972. These data are summarized in Table XXVI. Change scores were calculated for eleven of the twelve Program teachers. One teacher failed to take the test at the end of the year. The numerical data of Table XXVI are reported in terms of staten scores.

TABLE XXVI

Summary Statistics on Differences Between September, 1971 and July, 1972 Administrations of the Cattell Sixteen Personality Factor Test

<table>
<thead>
<tr>
<th>Factor</th>
<th>$M_1^*$</th>
<th>$M_2^*$</th>
<th>$M_D$</th>
<th>SD$_D$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>3.6</td>
<td>5.2</td>
<td>1.6</td>
<td>2.88</td>
<td>1.84</td>
<td>ns</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
<td>5.7</td>
<td>2.7</td>
<td>1.62</td>
<td>5.51</td>
<td>.001</td>
</tr>
<tr>
<td>C</td>
<td>2.9</td>
<td>5.9</td>
<td>3.0</td>
<td>2.79</td>
<td>3.57</td>
<td>.01</td>
</tr>
<tr>
<td>E</td>
<td>4.5</td>
<td>5.0</td>
<td>0.5</td>
<td>2.25</td>
<td>.66</td>
<td>ns</td>
</tr>
<tr>
<td>F</td>
<td>4.1</td>
<td>4.5</td>
<td>0.6</td>
<td>2.06</td>
<td>.58</td>
<td>ns</td>
</tr>
<tr>
<td>G</td>
<td>3.3</td>
<td>6.2</td>
<td>2.9</td>
<td>2.12</td>
<td>4.53</td>
<td>.01</td>
</tr>
<tr>
<td>H</td>
<td>3.8</td>
<td>5.5</td>
<td>1.7</td>
<td>2.28</td>
<td>2.146</td>
<td>.05</td>
</tr>
<tr>
<td>I</td>
<td>3.9</td>
<td>7.1</td>
<td>3.2</td>
<td>2.53</td>
<td>4.21</td>
<td>.01</td>
</tr>
<tr>
<td>L</td>
<td>5.0</td>
<td>4.1</td>
<td>-0.6</td>
<td>1.57</td>
<td>1.28</td>
<td>ns</td>
</tr>
<tr>
<td>M</td>
<td>2.8</td>
<td>5.5</td>
<td>2.7</td>
<td>2.43</td>
<td>3.70</td>
<td>.01</td>
</tr>
<tr>
<td>N</td>
<td>3.4</td>
<td>6.9</td>
<td>3.5</td>
<td>2.16</td>
<td>5.38</td>
<td>.001</td>
</tr>
<tr>
<td>O</td>
<td>3.9</td>
<td>6.2</td>
<td>2.3</td>
<td>1.85</td>
<td>4.11</td>
<td>.01</td>
</tr>
<tr>
<td>Q1</td>
<td>5.5</td>
<td>4.7</td>
<td>-0.7</td>
<td>1.49</td>
<td>1.56</td>
<td>ns</td>
</tr>
<tr>
<td>Q2</td>
<td>3.4</td>
<td>7.2</td>
<td>3.8</td>
<td>2.23</td>
<td>5.67</td>
<td>.001</td>
</tr>
<tr>
<td>Q3</td>
<td>2.0</td>
<td>6.1</td>
<td>4.1</td>
<td>2.59</td>
<td>15.26</td>
<td>.001</td>
</tr>
<tr>
<td>Q4</td>
<td>3.9</td>
<td>6.1</td>
<td>2.2</td>
<td>2.23</td>
<td>3.28</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Mean staten score, September, 1971
**Mean staten score, July, 1972
***Mean difference in staten scores, September, 1971 - July, 1972
Significant shifts in test performance were recorded on eleven of the sixteen personality scales. Of the eleven significant critical ratios obtained, four were significant at the .001 level of confidence, six were significant at the .01 level of confidence, and one was significant at the .05 level of confidence. The ten significant scales at the 1 per cent and .1 per cent confidence levels are discussed in the following subsections in the order of the magnitude of the critical ratios.

Factor Q2. There was a significant shift from group dependency to self-sufficiency, from being a "joiner" and good follower to a preference for making one's own decisions and to be on one's own. At the beginning of the Extended School Year Program the typical Program teacher had a percentile rank of 34 on this scale. By the end of the Program her percentile rank had shifted upward to 72.

Ten of the eleven teachers showed change scores in the direction of greater self-sufficiency. The eleventh teacher did not show a change, probably because she had the highest state score (6) on the pre-test and remained at this same high level on the post-test. The range of state scores on the pre-test for the ten teachers who showed change scores was 1--4. The shift upward in the post-test produced a range in state scores of 5--9. Thus there was no overlap in the distributions of scores for the two testings.

Factor B. There was a significant shift from a beginning-of-the-program intellective orientation that was concrete and pragmatic to one at the end of the Program that was abstract and oriented to ideas and their communication. One can also say that they shift in the teachers was from a "flatness" to a "brightness" from a being rooted in today and what one can see and touch to an interest in the past and future as well as the present.

1. The level of significance was estimated on the basis of a two-tailed test.
The scores of all eleven teachers shifted upward from a mean staten score of 3.0 at the beginning of the Program to a mean of 5.7 at the close of the Program. The pre-test staten score range was 1--5, whereas the post-test staten score range was 4--8.

Factor N. An average staten score gain of 3.5 on this scale is indicative of a shift from what Cattell calls a forthright, natural, artless and sentimental pose to one that is shrewd, calculating, worldly, and penetrating. Ten of the eleven teachers shifted toward the worldly and penetrating pole of this scale. The eleventh teacher did not show a change in her staten score. Taken as a group the typical percentile rank in September was 34. By the following July, after one full year in the Extended School Year Program, the typical percentile rank had moved upward to 69.

Factor Q. Persons with low scores on this scale can be described as casual, untidy, intellectually disorganized. Persons with high scores are controlled, socially-precise, and self-disciplined. The shift in the Program teachers was markedly from low score to high score. The mean staten score on the pre-test was only 2.0, with a range of 1--5. By contrast, the mean staten score on the post-test was 6.1, with a range of 3--10. The mean shift upward in staten score for the eleven month period was 4.1.

Ten of the eleven teachers showed positive change scores on this scale. The eleventh teacher did not show a change in either direction.

These four factors that reflected highly significant shifts in Program teacher scores between the beginning and the end of the extended school year have a common root in that region of temperament and personality that governs intellective orientation. It is certainly not unreasonable, even in the absence of control group data, to attribute the changes in basic intellective
orientation to the experiences and stimulations of the six weeks the teachers spent in residence at cooperating cultural institutions. These residencies caused all teachers to shift their orientation to a more sophisticated and worldly one, to one that is more interested in ideas and in abstractions, and one that is more rational and precise and more independent and self-reliant.

**Factor G.** Shifts in teacher scores on this factor were significant at the 1 per cent level of confidence. The shift obtained was from expediency to conscientiousness. The Program teachers at the end of the extended school year preferred to be less a law to themselves and were more desirous of taking on responsibilities. The scores of all but one teacher shifted in this same direction. Not one showed a shift in the other direction. The mean shift upward was 29 percentile ranks. The pre-test range of staten scores was 1--5, whereas the post-test range was 5--9.

**Factor I.** Another statistically significant shift at the 1 per cent level of confidence occurred with respect to the cold--warmth dimension. At the beginning of the extended school year the composite score of the Program teachers (3.9) showed them to be as a group toward the middle of the scale. At the end of the year the scores of the teachers on this scale had shifted appreciably (to 7.1 on a ten-point scale) in the direction of greater warmth and tenderness. Nine of the eleven teachers shifted in this direction. The scores of only one teacher changed in the other direction. This was a minimal change from a pre-test staten score of 7 (the highest staten score in the pre-test) to a post-test score of 6.

The connection between this particular teacher shift in temperament and the unique experiences of the extended school year is clear. A mildly realistic and no-nonsense point of view prevalent among the teachers at the beginning of
the year shifted, as they were exposed to a variety of ideas, people, and events, to greater tenderness and sensitivity.

Factor 0. Another personality change was from a mildly self-assured, confident and serene attitude at the beginning of the year (mean staten score - 3.9) toward more apprehensiveness, worry, and being troubled (mean staten score - 6.2). The logical interpretation of this significant result is that the extended school year succeeded in shaking the ordered and serene world of the teachers. Their experiences in the Program had probably succeeded in challenging the assumptions they held which underlay their views of schooling. Many teachers did report being impressed with the different styles of teaching and different modes of interacting with students that they had encountered during the year. They had also been forced to re-examine deeply held beliefs about teacher control, about silence and precise order in the classroom, about what their students were capable of achieving. Hence a significant shift in scores on this scale comes as no surprise. One purpose of the Extended School Year Program was to try to shake up the neatly arranged and controlled world of the teacher and to introduce some untidiness and a bit of disorder into it.

Factor M. This factor measures the practical versus the imaginative dimension of personality. The shift in teacher responses to the items of this scale was statistically significant at the 1 per cent level of confidence. At the beginning of the Program the mean staten score of the teachers was 2.8, which was in the direction of an orientation toward the proper and the conventional. The actions of the teachers were essentially regulated then by external realities. The end-of-Program administration of the 16 PF Test revealed a significant shift toward being imaginative and wrapped up in inner urgencies. The mean post-test score was 5.5. The average increment for the year represented the equivalent of 27 percentile ranks. Nine of the eleven teachers had gains in this direction,
one showed no change over the year, and one showed a decrease from a state of 6 to one of 4.

The observed shift from the practical to the imaginative parallels the shift reported for Factor B from concrete-thinking to abstract-thinking.

**Factor C.** There was a statistically significant shift in teacher scores on the emotional stability dimension. The shift was toward greater emotional stability. Significantly higher scores at the end of the Program year indicate greater calmness, less likelihood of being upset and a greater willingness to face reality factors. This significant shift toward emotional stability would then suggest in even stronger terms that the accompanying significant shift on Factor C means that the serenity that was discarded was unrealistic and that the concern and apprehensiveness adopted is consistent with being an effective professional.

The pre- and post-test mean state scores obtained on Factor C were 2.9 and 5.9, respectively. The scores of eight teachers increased between the administrations of the 16 PF and the scores of the other three teachers remained the same.

**Factor Q4.** There was also a significant shift in scores away from a relaxed, tranquil, and unfrustrated manner to one that is tense, driven, and fretful. In terms of the other significant findings from the 16 PF and the reports of teachers on how "loose" they felt all year, the interpretation of "tense" and "driven" here is in the intellective rather than the emotional sense. Participation in the Program was sufficiently stimulating intellectually to produce a much higher level of intellective alertness and tension.

In summary, shifts in teacher scores, significant at the 1 per cent level of confidence or beyond, were observed on ten of the sixteen scales of the
Cattell Sixteen Personality Factor Test. The pattern of shifts could be logically seen as being influenced by participation of the teachers in an intellectually stimulating program with staff development objectives in the direction of those obtained from the Cattell measure.

Because this was essentially a young group of teachers, most of whom were relatively new professionals, the loss of control data keeps us from judging to what extent the observed changes on the Cattell measure were traceable to normal seasoning and to what extent the changes were traceable to participation in the Extended School Year Program. It is very much within the realm of possibility that a portion of the variation in test score changes over the year was associated with general adjustment. But it is more likely that the tempo of changes in teacher temperament and outlook normally associated with the first few years of teaching was markedly increased as a direct consequence of participation in the Extended School Year Program.

3. Changes in Professional Attitudes: Results from the Administration of the Kerlinger Teacher Attitude Scale

The inability of the control group of twelve teachers to respond to the Cattell Sixteen Personality Factor Test at the end of the school year was accompanied by their inability to respond to the Kerlinger Teacher Attitude Scale. Hence, data on attitudes toward education were available from the Program teachers only. The analysis of their responses to attitudinal-type statements was toward discerning (a) the perspectives of the Program teachers at the outset of the Extended School Year Program, and (b) possible shifts in attitude which occurred during their first year in the Program.

The Kerlinger Teacher Attitude Scale is a Likert-type measure in which the teacher is asked to respond to 39 statements in terms of a five-point scale
of agreement-disagreement. The mid-point of the scale is labeled "Uncertain." Thus there are two degrees of agreement ("Strongly Agree" and "Agree") and two degrees of disagreement ("Strongly Disagree" and "Disagree").

The items of the Teacher Attitude Scale were constructed on the basis of the following paradigm:

(A) Attitudes:
   (1) Restrictive—Traditional
   (2) Permissive—Progressive

(B) Areas:
   (a) Teaching—Subject Matter—Curriculum
   (b) Interpersonal Relations
   (k) Normative—Social
   (m) Authority—Discipline

Kerlinger and Kaya discuss this paradigm as follows:

"The paradigm epitomizes the thinking that educational attitudes can be broken down into two broad Attitudes and four content Areas. By combining the two categories we would have in effect two-dimensional statements, an adequate sample of which should represent most statements that can be made on educational matters. For example, almost any statement that could be made about important educational issues can be categorized, say, as 1a, 2a, 1k, 2k, and the like."¹

Procedures for establishing the logical validity of statements constructed according to this paradigm, their construct validity based on factor analytic studies, and their predictive validity based on criterion group comparison are described in a series of papers by Kerlinger² and by Kerlinger and Kaya.³

All items of the Teacher Attitude Scale have high loadings on either a Traditional—Restrictive factor or on a Progressive—Permissive factor.

---

In addition, all items in a particular factorial set possessed high item-total r's.

Scoring of all responses was based on the assumption that the two factors represented the two poles of a basic bi-polar dimension of educational outlook or philosophy. Thus disagreement with a Traditionalism-type statement would be scored as a Progressivism-type response. In like manner, disagreement with a Progressivism-type statement would be scored as a Traditionalism-type response.

Examples of statements in the Kerlinger measure which reflect a Traditional orientation are:

1. One of the big difficulties with modern schools is that discipline is often sacrificed to the interests of children.

16. Since life is essentially a struggle, education should emphasize competition and the fair competitive spirit.

17. It is essential for learning and effective work that teachers outline in detail what is to be done and how to go about it.

Examples of statements that are couched in the rhetoric of Progressivism are:

25. Learning is experimental; the child should be taught to test alternatives before accepting any of them.

29. The American public school should take an active part in stimulating social change.

42. Children should be allowed more freedom than they usually get in the execution of learning activities.

Three statements were imbedded in the scale as repeats. Thus a total of 42 statements appeared. The purpose of including three statements twice was to provide a crude index of response consistency within a particular administration of the scale. In the first administration, 31 of the 36
responses, or 86 per cent, showed identity between the responses to the same statement presented at two different points in the scale. The five pairs of responses that did not display identity in all instances contained members that were one response position apart. In the second administration, 29 of the 36 responses, or 81 per cent, showed identity within pairs of responses to the same statement. Of the seven pairs of responses that were not identical, six of the pairs contained members that were one scale step removed from each other. The remaining pair consisted of a response of 3 (Uncertain) on the first encounter with the statement and a response of 1 (Strongly Agree) on the second encounter.

These data indicate a fairly high degree of reliability of the responses of the Program teachers to the attitudinal statements of the Kerlinger scale. Hence it was deemed proper to compare responses made at two different points in time and to be able to infer that any significant shift in attitude over time represented a real change in view on the part of the Program teachers.

Table XXVII presents the basic statistical data comparing the performance of the Program teachers on the beginning- and the end-of-year administrations of the Kerlinger Teacher Attitude Scale. The range of possible total scores is from +78 (Traditional) to -78 (Progressive), with a total score of 0 indicating that the respondent possesses an affective perspective which is midway between the two extremes.
TABLE XXVII

Summary Statistics of Beginning- and End-of-Year Teacher Scores on the Kerlinger Teacher Attitude Scale

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-24.4</td>
<td>-19.7</td>
<td>+4.7</td>
</tr>
<tr>
<td>S.D.</td>
<td>15.6</td>
<td>17.0</td>
<td>11.6</td>
</tr>
<tr>
<td>&quot;t&quot;</td>
<td></td>
<td></td>
<td>1.40</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>.10</td>
</tr>
</tbody>
</table>

At the beginning of the year the Program teachers as a group could be described as being very much in the direction of the Progressive pole (Mean = -24.4). All but one teacher showed a decidedly negative score. The observed range of scores was +13 to -54, with a standard deviation of 15.6.

By the end of the year there was a shift in attitude toward the Traditional pole. The beginning-of-the-year mean score for the twelve Program teachers had shifted from -24.4 to -19.7. The average difference of +4.7 was not statistically significant although the general trend over the year is toward a more Traditional view.

4. Teacher Judgments of Effects on Themselves

Data were presented in Chapter III, Section 5 on teacher views of the general effects of the periodic holidays and of the residencies upon their students. This section presents a summary of the views of the teachers on the effects of these two major components of the Extended School Year Program upon themselves. Their views were elicited in individual interviews.
of approximately one-hour duration. These interviews took place during the last two weeks of the Extended School Year Program.

a. **Effects of the periodic one-week recesses upon the teachers:**

Teacher responses to the open-end question, "What were the effects upon you of the periodic one-week recesses?", are summarized in Table **XXVIII**

**TABLE XXVIII**

<table>
<thead>
<tr>
<th>Type of Effect</th>
<th>Per Cent Teachers Mentioning Effect (N=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive effect on her emotionally</td>
<td>67</td>
</tr>
<tr>
<td>Opportunity to catch one's breath</td>
<td>58</td>
</tr>
<tr>
<td>Opportunity to plan</td>
<td>50</td>
</tr>
<tr>
<td>Opportunity to think about professional matters</td>
<td>50</td>
</tr>
<tr>
<td>Opportunity to work intensively with designated students</td>
<td>50</td>
</tr>
<tr>
<td>Opportunity to alter the environment of her classroom</td>
<td>25</td>
</tr>
<tr>
<td>Opportunity to be away from the children</td>
<td>25</td>
</tr>
<tr>
<td>Increased contacts with other teachers</td>
<td>25</td>
</tr>
<tr>
<td>Opportunity to decide how she was to spend the week professionally</td>
<td>17</td>
</tr>
</tbody>
</table>

The most common effect mentioned by the teachers was in terms of their emotions and general psychological state. They felt the periodic recesses made them more relaxed, or less tense, teachers. They reported experiencing less pressure in the extended school year. Tension in teaching for many of them had all but disappeared.

Beyond the general emotional effects there was the opportunity, during
a recess, to catch one's breath. Two teachers described it as "getting one's head together." Another teacher commented that the periodic recesses enabled her not to have to resort to sick leave when she needed to collect herself. This year she had no need to collect herself because the recesses appeared periodically and she could look forward to them and know the value of the break in the academic calendar.

It was the break with a classroom full of students that seemed to have been crucial. All teachers reported professional benefits of the recess in terms of being able to plan, being able to think in a more leisurely manner about professional matters.

Students were not forgotten during some of the recesses. Although the recesses were conceived originally as real holidays for the students and as periods of professional renewal and development for the teachers, half of the teachers defined professional development to include working with students in arrangements that they didn't think were possible when their entire classes were in residence at Chambers School. Thus one of the benefits cited by teachers was the opportunity the recess gave them to work intensively with designated students. Teachers who cited this benefit added that they experienced successes with the instructional arrangements they attempted. Several teachers remarked how impressed they were over how much was accomplished with particular students in one-to-one tutorial situations in a relatively brief sitting. A factor in the pleasure that the teachers derived from tutorial and small group instruction during the recesses was the willingness of the students to attend and their apparent satisfaction with the instruction as reflected in their cooperation.

Three of the teachers talked about the recesses affording them the
opportunity to take a careful look at their classrooms and to alter the physical environments in a more rational manner than they normally do. They were particularly motivated to do this as a result of the residencies, where new ideas for classroom arrangements, instructional aids, and decorations developed.

Several teachers reported increased contacts with other teachers during the recesses. The leisurely pace of the week, in which only a small proportion of the time of the teachers was devoted to formal staff meetings, allowed for informal contacts among the teachers. Teachers reporting this as a benefit of the recess indicated that the contacts were largely about professional matters. A wide range of topics was mentioned, from talk about differences in teaching style to talk about the characteristic and needs of particular students.

Two of the teachers were pleased that they were allowed to decide for themselves how they were to utilize their professional holidays. This, they felt, was a recognition of their professional status and maturity in programming their own time. This sentiment was shared by four other teachers who stressed the obverse of the situation. They voiced a dislike for staff meetings called during the recesses on grounds that they did not decide to call these meetings. The implication of these sentiments is that for there to be total staff educational activities during the recesses the needs for these activities must be expressed by the staff. Clearly a mechanism is needed to enable the staff to decide whether there is to be joint inquiry on educational matters, and then on which particular educational matters. Left to their own devices entirely, there is no indication that the planning and inquiry skills of the teachers increased as a result of the recesses.
b. Effects of the residencies upon the teachers: Each program teacher was also asked, in an open-end manner, to indicate the general effects of the residencies upon herself. Table XXIX responses they made.

TABLE XXIX
Summary of Teacher Responses to the Question of Effects of Residencies Upon Themselves

<table>
<thead>
<tr>
<th>Type of effect</th>
<th>Per Cent Teachers Mentioning Effect (N=12)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisiton of new knowledge:</td>
<td></td>
</tr>
<tr>
<td>In particular disciplines</td>
<td>25</td>
</tr>
<tr>
<td>About educational resources</td>
<td>33</td>
</tr>
<tr>
<td>About students</td>
<td>50</td>
</tr>
<tr>
<td>Developed new friendships:</td>
<td></td>
</tr>
<tr>
<td>With fellow teachers</td>
<td>25</td>
</tr>
<tr>
<td>With museum staff members</td>
<td>17</td>
</tr>
<tr>
<td>Changes in teacher behavior</td>
<td>50</td>
</tr>
<tr>
<td>Increased planning skills</td>
<td>17</td>
</tr>
</tbody>
</table>

A major dimension of teacher perceptions of effects on themselves of the residencies was the acquisition of new knowledge and information. Such new knowledge was of three types -- knowledge in particular fields and disciplines such as music, art, science; knowledge about educational resources at the cooperating cultural institutions which teachers reported they could now tap; and knowledge about students.

Six of the twelve teachers pointed explicitly to the residency as being effective toward extending their knowledge and understanding of the behavior, potentialities, and possibilities of their own students. The residencies enabled the teacher to be a more detached observer of her students.
than her own classroom did. Furthermore, she observed her students in a wide range of different settings and in interaction with many other instructors. As a result, she was witness to aspects of the behavior and personality of her students that she didn't know existed.

Changes in teaching behavior was another major effect reported by the Program teachers. These were changes that went beyond knowledge and understanding of particular children. Such changes seemed to have been influenced by observing the behavior of instructors during residencies. They had to do with the teacher's actual behavior in the classroom. When pressed for specific examples, the teachers talked about being more willing to let children find out things for themselves, being less controlling, providing less structure, developing more patience, asking more open-end questions and more speculative-type questions, and being more free and more natural with their students.

New friendships developed for some of the teachers. Three of them talked about the residencies allowing each of the to draw closer professionally to her fellow grade level teacher with whom the residencies was shared. There was a greater sharing of knowledge of students, more time spent on joint planning, and more time spent in talking about professional matters that just had not been discussed before. One teacher put it in this manner: "I no longer felt the social isolation imposed by the self-contained classroom. I no longer wanted to be secretive about myself as a teacher. It was so natural and so easy to talk with another teacher about common professional problems and reassuring to discover that others had the same 'hangups' I had."

The developing of friendships with instructors in the residencies was an effect mentioned by two of the teachers. When pressed, others said that in the second year of the program it would be much easier for them to do this. The ice had been broken in the first year. The majority of teachers needed
the full year to lose the awe in which they held the residency instructors.

The final category of effect of the residencies listed in Table XXIX was increase in planning skills which was reported by two of the teachers. These teachers referred specifically to the fact that the Program forced them to plan in advance for the residencies, to allocate and fill instructional time in order to prepare their students for a residency. In addition, planning was required for post-residency instruction that attempted to build on the experiences of the residency.

5. Changes in Teacher Classroom Behavior Based on Classroom Observation

To determine whether Program participation had any effects upon the classroom behavior of the teachers, observers visited the twelve classrooms while they were in session at Chambers School. Two visits were made by the observers, one at the beginning of the extended year (mid-September, 1971) and the other toward the end of that year (late June, 1972). Observations were made, during a sixty-minute period, of the following categories of teacher classroom behavior:

(a) The number of different activities occurring in the classroom at three points in time separated by twenty-minute intervals.

(b) The number of student-initiated activities.

(c) The number of instructional resources used apart from textbooks.

(d) The number of students with whom the teacher becomes actively involved.

Data obtained from these observations are presented in the following subsections. The data for the beginning-of-the-year observations are based on pooling of the notations of two observers of the behavior of the two teachers at a particular grade level. Two observers were required in order to provide
a check on rater reliability. Given a higher level of inter-rater agreement in the initial set of observations, the data for the end-of-the-year observations are based on the notations of one of the original observers, again pooling the observations made in the two classrooms at the same grade level.

The inter-judge comparisons for the first set of observations indicate a very high degree of agreement between the judges on each category of teacher classroom behavior observed. Although the two judges observed together, their notations were made independently. Considering that there were 72 pairs of scores obtained on the four observational categories listed on page 94,1 perfect agreement in scores was obtained for 66, or 92 per cent, of the 72 paired comparisons. Of the six pairs of scores for which there was disagreement between the two observers, five represented a difference of only one score point.

a. The number of different activities occurring in the classroom:
The general question posed here in evaluation is whether participation in the Program caused the teacher to increase the number of different activities that would take place simultaneously in the classroom. At both the beginning and the end-of-the-year a trained observer noted the number of different activities at three points in time separated by twenty-minute intervals. The time of day in which observations were made varied among the classrooms in random fashion and overlapped subject of instruction.

The facts of changes over the year on this observational category are presented in Table XXX. The hoped-for increase in the variety of instruc-

1. Three scores were obtained on the first category. Thus each judge provided six scores for each of 12 teachers observed.
TABLE XXX

Summary Statistics for Changes in Instructional Activities Occurring Simultaneously in Program Classrooms (N=12)

<table>
<thead>
<tr>
<th></th>
<th>Beginning-of-Year</th>
<th>End-of-Year</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.8</td>
<td>3.0</td>
<td>+1.2</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.7</td>
<td>2.1</td>
<td>1.1</td>
</tr>
<tr>
<td>&quot;t&quot;</td>
<td></td>
<td></td>
<td>3.75</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>.01</td>
</tr>
</tbody>
</table>

tional activities occurring in the classroom at the same time was obtained. The mean shift from 1.8 at the beginning of the Program to 3.0 at the close of it was significant at the 1 per cent level of confidence. One reason for the difference being statistically significant is that the magnitude of increase at four of the six grade levels was approximately in the ratio of 1:2.

b. The number of student-initiated activities: The Program did not appear to have had much effect upon an increase in student-initiated activities. A slight increase was observed in ongoing class instruction. The summary data of Table XXX indicate that at the beginning of the year there were, on the average for all Program teachers, 2.2 student-initiated activities per unit of observed time. By the end of the year this overall mean had increased to 2.5 A large proportion of this increase occurred at the first grade level. But statistically speaking, the change that occurred must be attributed to chance factors and therefore is not at all significant.

It is quite likely that there first has to be a significant rise in the number of different teacher-induced activities in the classroom before one can expect a significant movement or shift toward more student-initiated
TABLE XXXI

Summary Statistics for Changes in
Student Initiated Activities in
Program Classrooms (N=12)

<table>
<thead>
<tr>
<th></th>
<th>Beginning-of-Year</th>
<th>End-of-year</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.2</td>
<td>2.5</td>
<td>+0.3</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.7</td>
<td>3.2</td>
<td>2.1</td>
</tr>
<tr>
<td>&quot;t&quot;</td>
<td></td>
<td></td>
<td>.50</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>n.s.</td>
</tr>
</tbody>
</table>

activities. Based on the data presented in Tables XXX and XXXI, this is what appears to be occurring in the Program with regard to changes in behavior of both teachers and pupils in the Chambers School classrooms.

c. The number of instructional resources used, apart from prescribed textbooks: A clear purpose of the Extended School Year Program was to extend the range of instructional aids and resources available to the teacher. Additional sources of new instructional aids would be from the residencies. By their very nature, they contained a great variety of materials of instruction which until then were not utilized in the classrooms at Chambers School.

Table XXXII reveals an increase, during the year of the Program, in the overall average number of instructional resources used per unit of instruction observed. The mean rose from 0.8 at the beginning of the year to 2.5 at the end of the year. However, great variability was also observed in the difference gains among the teachers. The standard deviation of the mean difference of +1.7 was 3.4. Such a great spread in difference scores means that a few teachers accounted for most of the observed gain.
TABLE XXXII
Summary Statistics for Changes in Instructional Resources Observed in Program Classrooms (n=12)

<table>
<thead>
<tr>
<th></th>
<th>Beginning-of-Year</th>
<th>End-of-Year</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.8</td>
<td>2.5</td>
<td>+1.7</td>
</tr>
<tr>
<td>S.D.</td>
<td>1.0</td>
<td>3.6</td>
<td>3.4</td>
</tr>
<tr>
<td>&quot;t&quot;</td>
<td></td>
<td></td>
<td>1.68</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>n.s.</td>
</tr>
</tbody>
</table>

Although the probability that the obtained critical ratio of 1.68 is statistically significant at only .17 the gain achieved is an indication of teachers' meaningful participation in the program.

d. The number of students with whom the teacher becomes actively involved: Increased interaction between teacher and students was expected to occur as a direct effect of the Extended School Year Program. The rationale for this expectation was based on the altered rhythm of the school year in which both the periodic holidays and the residencies away from Chambers School would serve to heighten the teacher's awareness of the needs and qualities of her students.

A numerical index was established by the observer using a class seating chart and noting, within a twenty-minute period, all direct interactions between the teacher and her students.

Table XXXIII indicates that at the beginning of the Program the average number of active involvements of teachers with students was 8.6. This average had increased to 9.4 at the end of the Program year, or an average
increase of 0.8 per teacher. A statistical test of the difference between the two means obtained revealed that it was not a statistically significant

TABLE XXXIII

Summary Statistics for Changes in Number of Students With Whom Teacher Becomes Actively Involved (N=12)

<table>
<thead>
<tr>
<th></th>
<th>Beginning-of-Year</th>
<th>End-of-Year</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>8.6</td>
<td>9.4</td>
<td>+0.8</td>
</tr>
<tr>
<td>S.D.</td>
<td>2.1</td>
<td>1.9</td>
<td>1.8</td>
</tr>
<tr>
<td>&quot;t&quot;</td>
<td></td>
<td></td>
<td>1.51</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td></td>
<td>n.s.</td>
</tr>
</tbody>
</table>

one. The probability that the observed difference is traceable to chance fluctuations in the two sets of observations is .15. The inference that can therefore be made is that we cannot with any degree of certainty claim that the observed differences between the beginning- and the end-of-the-year observations are traceable to the Extended School Year Program. The data on variability indicates a wide range of differences among the teachers in both periods of observation. Thus the variation observed within a set of observations was greater than the variation observed between the two sets of observations.

6. Utilization of Instructional Resources

Upon the completion of each one-week residency at a cooperating institution, the teachers in the Program began to list new resource materials that had been brought back to the classroom. In addition, they enumerated act-
ivities initiated by resource institutions that were being continued in the classrooms.

The term "instructional resources" was not confined to hardware and software, that is, specific and concrete aids to instruction. It also refers to techniques and methods of instruction. The teachers, in keeping records of new classroom practices, were encouraged to conceive of resources for instruction in as broad a manner as possible.

The teachers kept separate records for each residency. The end of the Program year was set as the date for the completion of their records. This was done because teachers differed with respect to the speed with which they incorporated materials, techniques, and ideas into their own instruction. Also, it was expected that teachers often had to await the appropriate moment for the use of particular instructional resources. Of course, some intentions never materialized as realities and were not noted for the record.

The following sub-sections contain qualitative summaries of the reports of the Program teachers. Each sub-section focuses on the utilization of instructional resources from a particular cooperating cultural institution.

a. Karamu House

Many new techniques for the use of familiar materials were brought back to Chambers School classrooms from Mr. Simms' Art course. The use of dry tempera paints and allowing the children the freedom to mix their own colors was, for some teachers, a revelation. Papier Mache turned out to have many more applications and easier ways of handling. Murals were painted as a class or group activity, using readily available freezer paper.
The teachers learned that materials made available to students set up in a space where they can be freely explored led, not to chaos as many had expected, but to a great deal of intense work and much creative activity. Mr. Simms was a good model as teacher, both for the students and for their regular classroom teachers.

Dance rhythms and body movements were explored and here again teachers could learn, through both observation and participation, how to stimulate students to experience new ways of using body movement for creative expression. They learned some of the basic ballet positions as well as ways of combining these with other dance patterns.

Creative Dramatics presented the possibilities to the teachers of creating new situations for children to respond to. For example, mirror acting, pantomime, and the dramatization of stories from their readers, proved to be favorite activities of the children, not only at Karamu but subsequently at Chambers School.

Generally it was not so much the introduction of new materials into the classroom which proved to be the value obtained from the Karamu House residency but the helping of teachers to find new practical and productive ways to use the materials already available. This included the use of language, such as word games, and the stimulation of imagination for the development of ideas. In Art, the ordinary classroom equipment could now be used in unique combinations. For some of the teachers, allowing children the freedom to explore with materials is a new technique in classroom management. Teachers learned to use household items in instruction and found items for the use of simple rhythm instruments for music and body movement classes. Many new word games and creative dramatics techniques were brought
back to stimulate children in new language development.

Seeing other teachers working with a class, especially one's own, is a highly stimulating way for a teacher to pick up new materials and techniques, and to further her own repertoire of teaching behaviors. It is quite evident that the Karamu House residency gave the Program teachers much in the way of new instructional resources. The Karamu House logbook of one of the Program teachers reveals how it felt for this teacher to be a student. The following direct quotation deals with one session in Creative Dramatics:

"The children seemed excited at the prospect of my being a student as well as they. We were introduced to a large cool room which Sara uses for Creative Dramatics. The children in my group thought she was a teenager because she had braids and wore Levi's. Our various activities included walking, stretching, being so small and so big. We walked through glue, glass, cold and hot. She kept the class moving along rapidly, but a times spent too long on one idea, thereby causing some children to become weary. Most of the children were tired after the first fifteen minutes, but there was more to come. Sara let us watch an imaginary football game, the sound of which probably could be heard back at Chambers. We also saw a man up on a building about to jump. We discussed the five senses and how an actor uses them. We thought of the most terrible-tasting thing in the world and then drank it. Sara taught us to use the mirror and we practiced that for a while. One child does activities with his hands and face, the other mimics him. After that, we played with imaginary balls: beach, tennis, ping-pong, volleyball, in ascending and descending order according to size. Sara's method of teaching was very free. The children threw out comments at random. She would talk over the noise and miraculously be heard. I found that even with the noise, the children were listening."

Another Program teacher summarized her Karamu House residency in these words:

"The Karama experience provided me with an opportunity to see how third graders handle freedom. To my surprise they were not unruly and this caused my attitude to change within my own classroom. I no longer took them to the lavatory as a group. They
were allowed to go as the need arose, one at a time. They were also permitted to whisper in class and play group games or point or use flashcards when their school work was completed. My classroom became a lot less structured and everyone, including myself, felt a lot happier. I didn't feel the need to play policewomen so much."

b. The Cleveland Music School Settlement

Teachers seemed most impressed with the ability of their students to handle real musical instruments with respect. The fact that the children were trusted to use these instruments, expensive and fragile as they are, and for the trust to have been warranted, gave classroom teachers new respect for the ability of children to function in a free atmosphere of learning.

Because most classroom teachers come to music theory almost as naive as most of their students, this particular residency should have provided much new material and many new techniques. Perhaps, however, teaching music theory to youngsters requires much more than this comparatively brief exposure for a feeling of adequacy in the subject. The Program teachers did say that they came away from the residency armed with new songs, new ways to present, rhythms, and some new knowledge about the language of musical notation. However, follow through with instruments in the classroom seems too remote a possibility.

One of the important outcomes was the understanding, on the part both of teachers and students, of the need for discipline in the study of music. Music interpretation does not follow for the same freedom of expression as do the creative dramatics, dance, painting and sculpture instruction the children had been exposed to at Karamu House and at the Cleveland Museum of Art. The teachers learned that making music — and it was a "making music"
experience -- requires careful attention to detail and to strict following of instructions in order for anything to be produced on the instruments other than noise.

c. The Cleveland Museum of Art

The chief benefit reported by Program teachers was that this residency made them aware of museum holdings and helped them to see works of art in new ways. They were made much more aware of form, texture, and color in art as well as in their own every day experiences.

Museum post cards of museum holdings were held by the teachers to be a valuable and easily available teaching tool which they had not been aware of previously.

Teachers learned of the existence of art materials and techniques which can be used creatively by children in classrooms. Materials consisted of clay and plastics. Techniques included potting, decoration, and printing. As a result of the demonstrations by Museum staff members conducted especially for Program teachers, these materials and techniques were employed in Chambers School classrooms.

There was an immediate and direct extension of instruction in Creative Writing during this residency. Employed back in the classroom of Chambers School was writing about perspective, color, form, movement, emotions, thus encouraging new uses of language in poetry, description, and direct self-expression.

The museum classes in body movement to illustrate emotional and movement aspects of paintings and sculpture tied in closely with creative dance activities at Karamu House and reinforced the importing of these techniques.
in Chambers School classrooms.

The exposure of the Program teachers to the fine arts, the crafts, and the dance of non-Western cultures provided them with both ideas and techniques that would enhance their own instruction in non-Western content.

Instruction at the Museum of Art was more structured than instruction at Karamu House. Yet in the eyes of the Program teachers both residencies produced highly effective teaching. They were therefore able to see that effective teaching and productive learning can take place under either condition. They saw dramatically the importance of preparation, knowledge of subject matter, and interest in children's learning as being significant factors in successful instruction.

d. The Cleveland Museum of Natural History

Of all the residencies, this one yielded the largest number of instructional aids. This was not surprising in view of the fact that many of the holdings of a natural history museum can be acquired in some form for classroom use. Therefore, shortly after this residency rock collections; maps of different types -- climatic, physical, topographical; the Beaufort scale for making weather recordings; the stream table; live animals; books on the diverse aspects of natural history -- animals, flora, fauna, ecology, man, and others -- began to appear in the Chambers School classrooms.

The use of weather charts, maps, new observation techniques and recording devices were carried over to the later residency at Red Raider Camp, thus making that a more exciting and meaningful experience.

One of the best things that happened to the Chambers School students
directly, and therefore to their teachers indirectly, was their exposure to live animals during this residency. They were encouraged to touch and hold a variety of animals, including insects and snakes, fears of many of these city children. It also made possible a greater appreciation by students and teachers for the wildlife they were to be exposed to at camp. They gained in the understanding of the need to protect the wildlife from man's intrusion. Learning to be quiet so as not to frighten the animals, to respect their lives and their habits, represented an achievement for the students noted alike by teachers, museum staff members, and parents. This kind of understanding and awareness could not have been accomplished in the classroom alone, except, perhaps, by the rare classroom teacher who is an avid naturalist.

e. The Cleveland Health Museum

Little in the way of instructional materials or teaching techniques was brought back to Chambers School classrooms as a direct result of this residency. Most likely this was due directly to the fact that most of the instruction at the Health Museum was through lectures and demonstrations of attractive but quite fixed museum exhibits.

The lectures and the exhibits, the teachers reported, did serve to extend and sharpen their own awareness of bodily functions and of issues and ideas and new concepts in health education. They also felt that lessons beyond those offered by the museum staff could now be planned on an individual basis.
f. Red Raider Camp

The effects of the camp residency upon the teachers was almost exclusively in the affective domain as they experienced their students in a completely different physical and psychological setting.

A sharpening of the senses as one becomes more aware of the natural environment in a camping experience makes it possible to see more, hear more, feel and taste more in a city environment as well.

Respect for the environment and learning to care for and protect the natural flow of life can change attitudes and behavior toward each other as well. The children learned by living together to be concerned for each other's safety and comfort along with the need to protect small animals by being gentle, quiet and careful in the woods.

Responsibility for their own physical needs was assumed by the children throughout. How satisfying for teachers to watch their students learn in so short a time to be responsible for each other as well as for themselves, as well as performing the necessary chores cheerfully and efficiently. These group living activities, the teachers sensed, had implications for classroom management in the future.
A project that is based upon an extended school year must, at the very outset, obtain the permission of parents to allow their children to participate. This meant that the purposes and procedures of the program had to be explained to parents in great detail. To this end a series of special meetings for parents was held at Chambers School during the late spring and early summer of 1971. To ensure that all parents were at least aware of the new alternative for their children, a stream of letters and flyers was sent out to them in the early spring. Furthermore, publicity on the new program appeared in the local newspapers and on television. It is not known how many parents actually read and thought about the contents of these letters and flyers.

Judging by the impressive attendance at the public meetings, at each of which some 75 parents turned out, and the many questions posed to the Principal, Mr. Whelan, by phone and by personal visit, it is clear that by early summer the Chambers School Community, by means of informal as well as formal networks of communication, was very much aware of the new program.

Parents reported that they were impressed with the enthusiastic and painstaking effort the school district made in the parent orientation phase of the Project. The active participation at the meetings of members of the Board of Education, the Superintendent, Mr. Visci, as well as the Principal and the Project Director, convinced many parents that here was a Project that had the enthusiastic endorsement of people at all levels of responsibility for the education of their children. They were also impressed with the forthright discussion of issues of moment to them as parents, the chief of which was possible interference of the residencies in the development of basic verbal
and quantitative skills. A secondary concern, which parents discovered to their satisfaction had already been anticipated, was whether all of one's children attending Chambers School would be accepted into the new Program.

The 900 students at Chambers School represent approximately 435-440 families. To obtain 300 students for the new program, (50 at each of six grade levels), the consent of approximately 145 sets of parents was obtained. Although there was at the beginning of the parent orientation period anxiety about obtaining the consent of this number of parents, it turned out that volunteering came easily and rapidly. In early June a waiting list was begun.

All of the data obtained from and about parents were uniformly positive and possessed very little variability from the outset. Throughout the first year of the program there simply wasn't any "flak" from parents. What interested the parents once the program began was whether it would continue beyond the first year. Many of the parents reported in interviews that they had experienced too many false promises by public officials. Given their belief in what their school officials told them about the extended school year program - that this was an eminently sensible new educational program containing a minimum of risk to their children and a maximum of possibility for them - the parents wanted to be vociferous in behalf of continuing the program. As it turned out, this mood became more pronounced as the parents began to see at home tangible evidence of behavioral changes in their children, especially with respect to increased talk at home and to heightened interest in school. As early as mid-year many parents felt that they did not need to suspend judgments about the worth of the extended school year program pending completion of formal evaluation studies by the professionals. Their own senses had convinced them that the program had positive value for their children. They didn't want to let "a good thing" be abandoned.
1. Parent Opinion About Chambers School

In Chapter 3, Part 6, above, reference was made to a 19-item structured questionnaire sent to all Program parents in May, 1972. This questionnaire was designed to elicit affective responses to different aspects of the school and of schooling. Forms were returned for 70 per cent of the students in the Program, a rate of return which reflects the great interest parents displayed throughout the year toward the Program.

Data have already been presented in Table XIV, above, on parental responses to the five statements concerning their children and school. These data indicate that there was very broad consensus among the parents on the positive effects of the Program upon their children.

Table XXXIV summarizes the parental responses to the other fourteen items of the questionnaire.

<table>
<thead>
<tr>
<th>TABLE XXXIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent Responses to Statements Concerning Educational Matters</td>
</tr>
<tr>
<td>(Per Cent)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Per Cent &quot;Yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>About Teachers and Staff:</strong></td>
<td></td>
</tr>
<tr>
<td>Are interested in their students</td>
<td>100</td>
</tr>
<tr>
<td>Are willing to talk to parents</td>
<td>99</td>
</tr>
<tr>
<td>Are friendly when parents visit the school</td>
<td>100</td>
</tr>
<tr>
<td>Have a genuine interest in the children</td>
<td>100</td>
</tr>
<tr>
<td>If my child acted up in school, they would treat him (her) fairly</td>
<td>99</td>
</tr>
<tr>
<td>Don't approve of their methods of discipline</td>
<td>49</td>
</tr>
<tr>
<td>The Principal is doing a good job</td>
<td>100</td>
</tr>
<tr>
<td><strong>About Parents:</strong></td>
<td></td>
</tr>
<tr>
<td>He (she) wants to become more involved with the school to help his (her) child learn</td>
<td>90</td>
</tr>
<tr>
<td>Would be willing to be a teacher's aid, lunch room monitor, etc.</td>
<td>60</td>
</tr>
<tr>
<td>His (her) participation in school activities has decreased this year</td>
<td>42</td>
</tr>
<tr>
<td>He (she) is willing to go to school for a conference</td>
<td>100</td>
</tr>
</tbody>
</table>
Focus of Statement

<table>
<thead>
<tr>
<th>Focus of Statement</th>
<th>Per Cent &quot;Yes&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>No (she) feels PTA meetings are not worth attending</td>
<td>64</td>
</tr>
<tr>
<td>Other:</td>
<td></td>
</tr>
<tr>
<td>Feels school is an important part of the community</td>
<td>100</td>
</tr>
</tbody>
</table>

The overall impression of the data presented in Table XXVI is that the opinions of parents of children in the Extended School Year Program regarding the teachers of their children, the Principal of Chambers School, and other members of the staff are very positive. There is an almost unanimous sentiment that teachers are genuinely interested in their children and that the staff effort is geared in behalf of the children. The only discordant note with respect to methods of discipline, Approximately half of the parents responding disapproved of the methods currently in use.

Parents, furthermore, expressed almost universal interest in becoming more involved with the school in support of their children's learning. But such positive intentions need to find concrete avenues in order to be transformed into overt behaviors. It is clear that one of the major conventional routes, volunteering in an assisting role as teacher's aid or as lunch room helper, is not an attractive or perhaps realistic one for 40 per cent of the respondents. It is not clear, however, whether they are not attracted to roles of this type or whether they cannot be volunteers because many of them work or, if they are at home, are tied down by very young children.

2. Parent Attendance at Museum Open Houses

Three of the museums that were offering a program of instruction in the Extended School Year Program set aside one evening for an Open House for
parents. The Museum of Natural History had one on March 8, the Museum of

Each Open House made the entire museum available to the parents for a
period of about three hours. Parents were encouraged to bring their children
and interested friends and relatives. The program for each Open House pro-
vided for the parents to see the museum through the eyes of their own children
as well as events conducted by the museum staff. The purposes of the Open
House were, of course, of two types: (1) to show the parents that their
children were knowledgeable about and felt "at home" in the museums, and
their children. At each Open House the formal activities were modeled upon
some of the instructional activities for the children during their residency.

The school district made buses available to those parents that did not
have automobiles. A flyer announcing each Open House was prepared at Chambers
School two weeks in advance of the event and sent home with the children. As
it turned out, this device was almost unnecessary because most parents, in-
cluding those that did not attend the Open Houses, reported in the interviews
that they were under pressure from their children to attend from the moment
the children learned of the forthcoming Open House.

Attendance at the Open Houses was used as a crude measure of parent
interest in the Extended School Year Program. Table XXXV indicates the extent
of parents attendance. Percentages were calculated in the basis of an estimated
145 families represented in the Program. Thus the number attending is given
as the total number of families in which one or more parents brought one or
more children, including children not at Chambers School. Thus the actual
number of parents who attended the Open Houses was greater than the numbers
presented in Table XXXV.
TABLE XXXV
Parent Attendance at Museum Open Houses

<table>
<thead>
<tr>
<th>Open House at</th>
<th>N°</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural History Museum</td>
<td>78</td>
<td>54</td>
</tr>
<tr>
<td>Art Museum</td>
<td>103</td>
<td>71</td>
</tr>
<tr>
<td>Health Museum</td>
<td>74</td>
<td>51</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>255</td>
<td>59</td>
</tr>
</tbody>
</table>

*Families = 145

Teachers kept records of which children were accompanied by parents. But they were not asked to specify whether a mother or a father came alone or whether they both attended. The general impression of the teachers afterward was that about three-quarters of the families were represented by the mother, approximately one-eighth were represented by both parents, and the remaining one-eighth were represented by the father.

Table XXXV reveals that at least one-half of the families were represented at all three Open Houses, with a most impressive attendance of slightly over 70 per cent recorded for the Art Museum Open House. Attendance could have been higher for the Open Houses at the Natural History Museum and Health Museum because both evenings witnessed cold weather and snow on March 8 and severe thundershowers on June 28. Despite the adverse weather conditions, however, attendance figures at all three Open Houses are impressive.

A total of 123 families, or 85 per cent of all families in the Program, were represented in at least one of the Open Houses.

3. Parent Visits to Cooperating Cultural Institutions During the Residencies of Their Children

Parents had open invitations to visit a cooperating cultural institution while their children were in residence there. They would either travel in their own automobiles or they could take the same school bus their children
used. On every day of residency away from Chambers School there was room on the bus for several parents.

A random sample of parents from 36 families in the Program — three from each of the twelve classrooms — was interviewed at mid-year (early February) and at year end (mid-July). All parents interviewed were asked whether they had visited the various residencies. Table XXXVI indicates the results obtained.

**TABLE XXXVI**

Proportion of Parents Interviewed Reporting Visiting Their Children During Residency (N=36)

<table>
<thead>
<tr>
<th>Residency At</th>
<th>N</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karamu House</td>
<td>14</td>
<td>39</td>
</tr>
<tr>
<td>Museum of Art</td>
<td>12</td>
<td>33</td>
</tr>
<tr>
<td>Museum of Natural History</td>
<td>9</td>
<td>25</td>
</tr>
<tr>
<td>Health Museum</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Music Settlement</td>
<td>4</td>
<td>11</td>
</tr>
</tbody>
</table>

The data of Table XXXVI indicate that parents were indeed interested in the Program and in seeing it in its tangible forms outside of the school district.

Table XXXVI also indicates differences in visitation rates for the cooperating cultural institutions. A parent's decision to visit the residency, other interview responses showed, was a function of interest in the institution and the quality and quantity of children's talk at home about what they were doing and experiencing in the residency. Karamu House had inherently greater attraction to the parents because of its long time association with the black community of Cleveland. Of the several museums, the Museum of Art seemed to have been inherently more attractive in general. Parents interviewed reported greater awareness of this institution and greater interest in collections and activities.
Parent and Child Voluntary Visits to Museums and to Karamu House

At the end of the Extended School Year Program parents filled out a questionnaire which inquired whether they and their children visited the cooperating cultural institutions on their own after the children had completed their residency.

Questionnaires were returned from 61 of the families (43 per cent return). Table XXXVII summarizes the responses obtained for four of the institutions.

<table>
<thead>
<tr>
<th>Institution</th>
<th>N</th>
<th>Per Cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Museum of Art</td>
<td>16</td>
<td>26</td>
</tr>
<tr>
<td>Karamu House</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Natural History Museum</td>
<td>17</td>
<td>28</td>
</tr>
<tr>
<td>Health Museum</td>
<td>15</td>
<td>25</td>
</tr>
</tbody>
</table>

A number of questionnaires returned contained such notations as "will be going soon" or "we will visit these different places after school is out." Although these responses were classified as "not attending", such responses represent intentions that would not have existed had their children not participated in the Program.

Overall, approximately one-quarter of those families returning a completed questionnaire indicated post-residency voluntary visits had been made with their children to the cooperating cultural institutions. Although no norm can be established to serve as a standard to evaluate the magnitude of the attendance figures reported in Table XXXVII, given the sparse attendance at University Circle institutions of inner city residents and given the recency of the residence, the attendance figures presented are impressive. They
indicate that parents and their children were indeed using the museum facilities and that the residency is an effective mechanism to achieve parental and student use of these educational facilities. It remains to be seen whether the attendance figures of Table II represent a base from which future growth in attendance will occur. In the second year we will be able to see whether there will be different voluntary attendance rates between students in the second year of the Program and students new to the Program.

The lower attendance rate at Karamu House can be explained in terms of the very different program of activities there as compared with programs at the museums. Attending Karamu House means either registering for a class or attending an event in the performing arts. By contrast, attending a museum is less expensive and can be accomplished on a more leisurely basis.

5. Summary

Parent belief in the inherent worth of the Program had positive effects on the children as well as on the teachers and staff at Chambers School. Parents also influenced sentiment in the greater community as well as at the central office of the East Cleveland Board of Education through the great variety of informal networks of communications that exist in that community.

Obviously there was an interaction between parents and children. Parents made the original decision to place their children in the Program. They made these decisions with enthusiasm but with the hypothesis, to be tested with additional data, that the Program would succeed. The key source of data for the parents was the behavior of their children at home. By the time of the mid-year interviews every parent interviewed reported having been impressed with the enthusiasm of their children for the Program activities as reflected
in every sense talk of ... and in the development of new knowledge, new concepts, and new interests. Thus the hypothesis was tested and found to be valid. From then on the parents simply wanted to know whether the Program would be continued beyond the first year.

The children in the Program were pleased with their parents' positive sentiments toward the Program. They were also desirous of showing their parents the extended world that was represented in the residencies. Never had the report by all parents interviewed that they were pleased with the pressure put upon them by their children to attend the evening Open Houses of the museums. Not all parents attended, but all wanted to attend in order to please their children and to see at first hand what they had experienced and learned. Those who couldn't attend had excellent reasons - a night job, illness at home, inability to afford or to obtain a babysitter - yet expressed deep regret over being unable to attend.

The interviews indicated that the parents had become well-informed about the cooperating cultural institutions and about their several curricula. Rare was the parent who couldn't indicate in the interview the names of the cooperating institutions and the nature of activities the children were involved in there. This information was derived almost exclusively from the children. Parents reported that in the main the children came home babbling with this information and wanting to tell about the residencies before being asked. It was this attitude that impressed so many parents. They loved to hear the spontaneous talk because it was clear evidence of interest and engagement.

We pointed out in the introductory section of this chapter that it was presumptuous of the Program to expect it to have effects on parents, that is, to change their behavior. If anything, parents contributed mightily to the success of the Program through their support and enthusiasm.