The purpose of this practicum was to develop and field-test a model for reorganizing traditional school plants to accommodate and support individualized instruction. The model was implemented in five areas of eight traditional buildings in the metropolitan Atlanta area. Results demonstrated that reorganization could be accomplished at considerable savings over new construction. The practicum results suggest that the model may be useful to administrators for evaluation of similar school situations.

(Author)
Practicum Report

DEVELOPING A MODEL FOR REORGANIZING TRADITIONAL SCHOOL PLANTS FOR INDIVIDUALIZED INSTRUCTION

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Maxi I Practicum
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# PRACTICUM REPORT

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PREFACE

In deciding upon a practicum topic, the writers asked for suggestions from their peers and colleagues regarding how their efforts could be effected to serve the needs of students. This practicum report reflects one major area of their concern -- developing a model for reorganizing traditional school plants to accommodate instruction.

The authors have drawn upon research, experience, and advice in compiling and field-testing the contents. It is hoped that the contents will prove beneficial to the educator wishing to improve instruction in a traditional school.
ACKNOWLEDGMENTS

The participants gratefully acknowledge the assistance of the many individuals and organizations who contributed to the development of this practicum. Without their help, this study would not have been possible.

Each of the superintendents in the four selected school districts sanctioned the study and authorized release of pertinent data from his office. The cooperation of the superintendents and the assistance of their staff members was a first step in initiating the study.

Planning Department personnel from the Atlanta and DeKalb County School Systems provided financial and architectural information from which participants were able to gain perspective of the problem at hand. Also, personnel of Cherokee County High School rendered a valuable service in setting up and printing portions of the illustrations and drawings used in the practicum.

Several fellow principals were surveyed to identify the areas of their buildings which would be most applicable in conducting this study. It was from the survey results that learning areas for implementation were selected.

In addition, architects, contractors, teachers, students, and lay persons responded when called upon, all providing much-needed help to this study.
INTRODUCTION

The goal of American education is to train young people to fulfill their own needs and those of society. For years, psychologists and teachers have talked about the needs and differences among children; and curriculum planners have written thousands of articles and books about individualizing instruction. Through it all, administrators and architects have professed their commitment to a child-centered school. In reality, however, their thoughtful and well-meaning intentions got sidetracked and school buildings continued to be constructed in terms of groups of children centered in one traditional classroom with one teacher.

Recently, attempts have been made to improve upon tradition. School districts have increasingly focused their attention on the learner. As a result, new approaches have developed which stress open space, continuous staff utilization, and independent study. These approaches hold great potential for the improvement of education in America. However, they are held back by one important barrier - the traditional school plant. In order to overcome this barrier, school districts and school administrators must construct or remodel buildings that meet the changing needs of the learner and society.

This practicum report is an effort to assist school administrators in improving instructional opportunities for students in a traditional school plant, and to effect this purpose as effectively and efficiently as possible.
STATEMENT OF THE PROBLEM

The purpose of this practicum was to develop a model for reorganizing traditional school plants into structures to accommodate the concept of individualized instruction. There is a growing concern over unproductive educational practices that have caused administrators to try to bring about a humanistic learning environment which can nurture the wide range of student talents. Most schools, however, remain traditional in design and in the program offered. Two factors make it particularly difficult to affect change: (1) hesitancy on the part of communities to support innovative programs, and (2) growing resistance to spiraling construction costs. Therefore, an overwhelming case can be made for continuing to use existing serviceable school plants by making alterations.

Within this practicum, a model was developed to assist administrators in reorganizing traditional school plants into flexible structures that will facilitate the implementation of individualized instruction.
DEFINITIONS OF TERMS

1. Traditional: The term "traditional," as used to describe plants in this study, refers to egg-crate-designed buildings that hamper flexibility in the learning environment.

2. Facilitate: The term "facilitate" refers to the ease with which the individualized process can be implemented from the design of the learning environment.

3. Individualized Instruction: "Individualized Instruction" refers to a curriculum - (building, management, learner, teacher) which allows the learners to proceed through what is to be learned at their own rate of speed, commensurate with their abilities, interests, needs, and motivational patterns. Improvement or facilitation can be measured by observing the flexible use of classrooms, media centers, mobile furniture, portable partitions, and corridors.

4. Model: "Model" refers to the learning packets designed to reorganize traditional school plants for the flexibility that facilitates individualized instruction.
REVIEW OF LITERATURE

SCHOOL COSTS

Citizens and educators are adjusting to the economic reality of the times. Prices continue to escalate, and demands for educational services continue to increase. However, there are not enough tax revenues to meet both costs and demands. Education competes with programs in health, sanitation, welfare, the environment, drug rehabilitation, crime prevention, and others for its share of public support. As taxes have been pushed upward to meet these pressing needs, taxpayers' resistance has stiffened. Voter acceptance of school capital programs is almost non-existent in many parts of the nation. The United States is short approximately three-quarter million classrooms. Yet, in 1970, about half of the bond referendums were defeated and approximately 1.7 billion dollars were curtailed from capital improvement programs.

Although school facilities constitute only a small part of the total cost of education, the cost is a very visible one. When money is in short supply, the educator must develop alternative plans to serve the needs of the students and the community. Thus comes into being: Systems Building, Fast Trucking, Construction Management, Joint Occupancy, Encapsulated Space, Everywhere Schools, Human Resource

1School Renewal, Educational Facilities Laboratory, p. 2.
Centers, and the Expanded School Year. Although these terms have different concepts regarding how school programs should be operated, they all have one common goal—the promise of reduced costs.

Schoolhouses represent a large investment and should not be soon abandoned and replaced. Age should not be the sole indicator of obsolescence. Over one-quarter million classrooms and over one-third of the nation's urban schools have been in use for over half a century. In their present state, most are incapable of meeting today's demand. The challenge, however, is to recognize the potential of these buildings and renew them to serve useful contemporary purposes.

SCHOOL RENEWAL

Renovations and additions have always been an important part of annual school outlays, constituting in the past few years almost one-third of the total educational construction dollar volume. The emphasis, however, has been on replacement and repair of equipment and materials and on updating to meet safety codes; meeting building standards, in other words. But it is predictable that within a few years the share of the dollar spent for modernization will pass the 50 percent mark, and much greater emphasis will be spent on making

2School Renewal, p. 2.

our out-moded buildings serve new educational standards.\textsuperscript{4}

Renovation or remodeling in itself is not the panacea for the school's economic ills, but it is an important option available to the prudent administrator.\textsuperscript{5} In the past, it has been done to alleviate specific inadequacies. Now, however, it should be effected as a system-wide approach to updating school plants to meet the individual needs of the students.

**PLANNING**

In the past, the size and shape of most school buildings were determined by the superintendent, the Board of Education, and influential Parent-Teacher Association groups. These buildings displayed vast differences in their size, shapes, and costs. Inequalities existed in the caliber of buildings within districts. On a statewide scale, the inequalities grew more noticeable. To correct these inequalities, the courts have recently taken action; but previously constructed buildings still exist.\textsuperscript{6}

Before an instructional program is altered and school renovation initiated, the wise administrator will plan. In his plan he will

\textsuperscript{4}School Renewal, p. 3.

\textsuperscript{5}Ibid, p. 3.

\textsuperscript{6}Anne and John Bremer, Open Education - A Beginning, p. 141.
consider educators, architects, public officials, planners, parents, students, teachers, the community, engineers, economists, psychologists, and others. If he is from a large school system, he may be fortunate enough to call upon the services of an established planning department to assist him.

Increasingly, however, school districts are contracting overall planning, design, and construction management services from qualified consultants. The architectural profession is moving steadily into solving environmental problems once considered beyond the scope of traditional architecture, through the interdisciplinary team approach of expanded services. Many school systems feel that at least the initial work of surveying, designing, and formulating procedures can be performed better under contract than by straining their own organizational operations. We can expect this trend to grow as more boards and other official corporate bodies become aware of the fuller ranges of services available to them.7

The first step in planning is to establish goals. Goals are necessary so that the administrators and the community can review

7School Renewal, p. 6.
their present condition and decide upon a course of action. Organization changes, social and racial implications, early childhood, career, special education, individualized learning, team teaching, continuous progress, and non-graded education should be discussed.

As mentioned, a number of individuals and groups must be considered in the planning stage. However, there are two groups that should be given special consideration—parents and teachers. Past performance has shown that innovative programs are unsuccessful unless parents and teachers understand and support them. To gain their support, a good administrator will hold weekly briefings and seek input into improving the instructional program or the design of the building. Such briefing will reinforce their understanding and help to reassure the community that it is benefitting from the new experience.

As mentioned before, the Board of Education, whose prerogative is to set policy, can no longer afford to do so in isolation. Too many outside pressures influence every significant question. Ways must be found to channel these diverse influences into a positive position. The U. S. Office of Education has championed a process known as Charrette, which brings representatives of the many segments of a community together with the decision-makers, in a concentrated

series of work sessions. It is basically a method of citizen involvement and confrontation and can serve very well in many situations. Other less volatile means can also be used: community committees, small group meetings, public presentations, educational consultants, or informational seminars.9

However it is done, a procedure should be established to absorb input from many sources, conflicting or not, before overall goals or specific educational program requirements are settled.10

FEASIBILITY

Planning and establishing goals are necessary. But planning and goals are worthless unless they can be implemented. If they cannot be implemented, they are not feasible and should be abandoned. New plans and goals should then be established.

A facilities feasibility study involves a series of overlapping phases:

- Assembling and analyzing data
- Surveying existing conditions
- Studying the options
- Recommending a course of action

Much of the preparatory work can be gathered from files already

9Barbara Blitz, The Open Classroom: Making it Work, p. 45.
10School Renewal, p. 8.
in the district's central office. Data on school population trends, attendance boundaries, use of buses, housing patterns and racial mixes, location of traffic arteries, and many other types of demographic information need to be gathered and catalogued for future use. The district engineer can furnish information on street grades, utilities, topography and plans for the future development; and the assessor can provide estimates on land values and give opinions on the availability of land. School personnel knowledgeable in local matters are invaluable in looking for found space -- nonschool facilities that might be converted to educational uses.11

Maintenance records on schools or reports by school facilities advisory committees help immeasurably. In one school district, building needs committees consisting of the principal, teachers, staff, and citizens had been in operation at each school even before architectural consultants were retained. The pre-survey surveys made by these groups, though often not technical in nature, pinpointed the buildings' shortcomings and gave insight into the communities' levels of expectation.12

As the study progresses, more data is gathered. Reports from survey teams can add to the data that can be used in developing options and recommending solutions.

Physical plant surveys are critical to the modernization process, and require experienced professional evaluators. Such surveys are required to:

- Determine conformance with safety and building codes
- Look for signs of deterioration in the structure and in mechanical and electrical systems
- Check the accuracy of existing plans
- Evaluate the functional use of existing space and their adaptability
- Assess the environmental aesthetics of the building
- Study site usage and adequacy
- Learn of complaints first-hand by interviews with staff and custodians
- Collect data for future cost estimates
- Check neighborhood characteristics

Not all surveys need the same in-depth thoroughness. Often an experienced team can conclude, after a walk-through inspection, that too many building elements and systems would have to be replaced at far too great a cost for modernization to be feasible. Again, from a knowledge of the types of structural systems and materials common to various vintages of school buildings, and from examination of the plumbing and electrical installations and level of maintenance, a brief inspection by such a team can bring out approximate cost
figures for general modernization.13

In other words, a school or school district unsure about the feasibility of modernizing old buildings need not commit itself at the beginning to a full service study without some assurance that the renewal route is possible. Services can be phased, moving along as findings warrant.14

An important by-product of a district-wide school facilities survey is the accumulation of information for continuing programs of preventive maintenance and future modernization. Thus, formal surveys should be conducted systematically and the results uniformly recorded. School personnel should be able to use the same system in later years to revise and update the information and establish priorities for school renewal.15

Generally, a checklist record sheet for each project is very effective. This lists site size and adequacy, the building's age, type of construction, condition of equipment and systems, deficiencies in code and safety standards, and general overall impressions.16

15Ibid, P. 13
16Ibid, p. 13
A room condition schedule gives detailed information on the condition of chalkboards, walls, floors, ceiling, heating units, etc. At the same time, drawings are checked for accuracy. These individual schedules, combined with the room rehabilitation schedules (which are prepared later), are the most important sources of cost estimating information.\textsuperscript{17}

Another method used for evaluating existing buildings is the score card, which breaks down the elements of a school building: site, neighborhood relationship, exterior, interior structure, plumbing, electrical and mechanical systems, fire safety, educational spaces, etc. Each category is assigned a weighed point value corresponding to its judged importance to the whole facility. Added together, the point values give an idea of the adequacy of the building.\textsuperscript{18}

The search for solutions and carefully evaluated alternatives must begin when the initial stages of the feasibility study have been completed. There seldom is one clear-cut position so obviously superior to any other that it defies comparison. Most design solutions are arrived at after carefully weighing the options, and some compromises

\textsuperscript{17}Ibid, p. 14.
\textsuperscript{18}Ibid, p. 15.
are likely to be made. The fear that these schools cannot be suitably adapted to house modern programs is largely unfounded.19

The objectives of remodeling are not necessarily to create wide open spaces everywhere, but rather to create fluidity—environments that can be rapidly and easily adapted for a variety of small or medium group activities. Knocking down walls between classrooms can help in creating this fluidity, but it need not be necessary to eliminate all self-contained classrooms as long as they are considered but one variety of space within an overall flexible learning cluster.20

Other drawings show how useful space can be recaptured from areas now under-used or functions now obsolete. For example, many schools find the traditional large auditorium of small value now but it can be turned into a fine, centrally located learning resources center by elevating the floor and by carpeting. Similarly, existing cafeterias or too small libraries can serve as suitable kindergartens or open instructional clusters. Many old schools have boiler rooms and coal shutes that have been abandoned and generally used only for miscellaneous storage. Imaginative planning might recapture such spaces for music rooms or other special purposes.21

19Ibid, p. 15.
20Ibid, p. 15.
21Ibid, p. 15.
What the plans cannot show, however, are the uses of materials and the architectural treatment of the spaces. Old buildings can be made wonderfully warm and exciting by good interior design. Contrasting carpets and other floor materials, changes in heights (possible with the old high ceilings), differing light fixtures and intensities often can be used to better advantage and with less sterility than is frequently seen in the manufactured look of many new buildings. Paint alone can help rejuvenate if the color selection is taken out of the maintenance department and put in the hands of a sympathetic designer.22

Modernizing a school goes beyond just architectural revitalizing. It includes new furnishings also. Standard classroom furniture and equipment does not function well for the programs and spaces now being introduced. A common mistake has been to crowd too many traditional desks and chairs into the open areas. Manufacturers have been slow to recognize the new requirements, but now they are tooling up rapidly. Equipment need not be elaborate and some can be made by the children themselves. The primary requirement

22Ibid, p. 15.
is flexibility — units that are modular and can be used interchangeably for sitting, working, storing, and dividing. Some imaginative products, a few that can be recycled, are now on the market.23

**COST CONSIDERATION**

Evaluating proposed plans should raise some considerations concerning options.

At one end is the possibility of gutting a room or building, removing all or most of the walls, replacing most of the plumbing, mechanical and electrical systems, adding air conditioning, re-roofing, replacing or reducing the fenestration, carpeting, and adding new cosmetics. At the other extreme is a new coat of paint and the minimum work required to meet local inspection codes.

An important consideration in a complete program of rehabilitation must be consistency in standards. The program may have to be cut to meet financial reality, but it would seem better to lower the overall level of expectation rather than have some high spots and other dismal failures. A community as a whole is far more willing to accept a program that seems fair to all, than one that singles out certain cases for special consideration. All schools need not be brought up.

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23 Ibid, p. 15
to the same level of performance simultaneously, however. This is generally impossible anyway and does not take into account other practical factors such as predictable population shifts that may make one school unnecessary in five years or the deteriorating condition of another that will necessitate its replacement in the near future.24

About 40 percent of this total is in construction which remains stable with time: site preparation, excavation, foundations, floor and roof framing, structural columns and beams, and walls. These are the fixed building assets. The remaining 60 percent constitutes those items most subject to deterioration - plumbing, mechanical and electrical systems, roofing, sheet metal, ceilings, partitions, floor and roof finishes. The greater the care given the building over its lifetime, the less the need to replace these items; the less the need, the greater the opportunity to make changes that benefit education.25

It is almost impossible to say precisely what a modernization project will or should cost...there are just too many variables. Community support, for example, is a variable that can either make or break almost any proposal. The significance of history or antiquity

24 Ibid, p. 15

25 Ibid, p. 16.
in a landmark building is of increasing emotional importance and is also without a price tag. The costs of some modernization projects are combined with other considerations, such as meeting earthquake safety codes in San Francisco. A commonly used rule-of-thumb states that if modernization costs exceed 50 percent of the cost of replacing the building, the project should be reconsidered. However, enrollment pressure or double sessions often force districts to exceed this rough formula.26

More precise cost comparisons can be applied that follow more practical and established principles of economics. From a pure dollar and cent point of view, the practical question in replacing any structure or machine is not its age but whether the cost will justify its continued existence.

Rather than merely considering the initial costs of new or remodeled construction, a replacement economy study compares the equivalent annual costs over the prospective life of a new building against the annual costs connected with retaining and renovating an existing building over its expected economic life.27

IMPLEMENTATION

If proper planning has taken place, the implementation of modernization and renovation should not be difficult.

26Ibid, p. 16.

There is nothing unique about implementing a modernization program, except the need for careful management. Many factors are involved. More children are attending classes whose normal schedule must be preserved as much as possible. More tasks must be performed, more contracts administered, more plans drawn, and more people involved. More functions, processes, and schedules must be interlocked into a cohesive whole. But along with the added complexities, there is an opportunity to challenge traditional methods of getting construction work built by developing an operational framework that strengthens the project delivery process.\textsuperscript{28}

A review of vintage school buildings reveals a predictable similarity in their construction and appearance, depending upon the era in which they were built.

Those built before 1900 are likely to have wood framing and floors, exterior masonry walls, and inadequate fire ratings and safety exits. Often the spaces themselves are appealing -- with airy classrooms and extra wide corridors -- but generally have inadequate heating and ventilation. Such structures should be given careful scrutiny before they are retained. They can be turned

\textsuperscript{28} School Renewal, p. 17.
into exciting schools, but adaptation can be an expensive process if many structural changes are contemplated or if routine maintenance has been neglected.29

Schools built in the first decade of this century are likely to have cast iron interior columns and exterior masonry bearing walls. They may also have built-up steel beams and girders and flat tile floor arches. Surprisingly, their interior columns make these vintage schools more amenable to internal space rearrangements, but they still suffer from lack of adequate fire and safety protection.30

Schools built between the two World Wars are typically constructed of rolled steel structural members, masonry bearing walls, concrete floors, and sometimes all concrete framing. Ceiling heights in these buildings are still higher than they are today, and the mechanical system is probably a steam boiler with cast iron radiation. In spite of interior bearing walls, which limit some space changes, buildings in this age group quite feasibly can be remodeled.31

More emphasis is being placed on developing a systems approach to

remodeling, by attempting to introduce standard building components to remodeled interior spaces, since many of these spaces follow set patterns. For instance, unified ceiling, lighting, heating and cooling distribution outlets, and other electrical, inter-communication and audio-visual systems, might be incorporated into a standardized classroom-sized unit. Mechanical units serving such a module could be incorporated in the space between the high old ceiling and the new suspension levels. Cabinet units, chalkboards, wardrobes, and many other traditionally built-in necessities can be provided in packaged form. Plumbing fixtures and rough-ins are always a problem in rehabilitation and efforts are being made to incorporate these in factory-finished elements. The production and jurisdictional difficulties of systems-building is well known, more so probably than the many examples of substantial success. In the field of modernization, the impact of a systems-approach has not been dramatic so far, but it's only a recent development.32

CONSTRUCTION

Construction planning would require concentration on the part of teachers, students, and the administrator. Careful plans must be drawn to move classes into unoccupied areas or found spaces. Traffic

must be re-routed to avoid accidents and interference with workers.

Construction should be planned for the summer months. If it cannot be implemented, plans should be made to utilize auditorium and cafeteria space for classroom use. If this is not possible, the children may have to be housed in other school buildings in the district. Whatever the alternative, the scheduling of manpower and resources is critical in the modernization process.

OCCUPANCY AND EVALUATION

Occupancy should not take place until the building is thoroughly inspected for defects in workmanship, materials, and equipment. After occupancy, care should be taken regarding cleaning and maintenance. For this purpose, all users should be counseled as to each individual's role in caring for the building.

Once occupied, the planners should be kept informed about the building and the program's activities. The architect, for example, should be extended a standing invitation to return for evaluation purposes.

Evaluation serves as a source of input for new and continuing programs. As in other phases, it takes team effort: the users learn the strengths and drawbacks of the facility, the designers suggest changes, encourage new uses and make modifications in keeping with the percepts and capabilities of the building itself.
EXECUTING THE PRACTICUM

OBJECTIVES

1. **General Objectives:**
   a. Develop a model that can be used in reorganizing existing school plants to facilitate individualized instruction.
   b. Formulate a plan for evaluating the model.

2. **Special Objectives:**
   a. Given the questionnaire developed, 10 percent of the 300 school administrators represented in the participants' four metropolitan Atlanta school systems will be able to identify a minimum of five ways to reorganize a traditional school plant into a flexible structure that will facilitate the implementation of individualized instruction.
   b. Using the results of the questionnaire, each participant will design a facilitating packet to reorganize a specific area of an existing school plant to accommodate individualized instruction.
   c. Using the designed packet developed from Objective 2, each participant will implement a packet and reorganize an area of an existing school plant to support teachers' efforts to individualize instruction.
d. Participants will demonstrate three ways that existing school plants can be reorganized at a minimum of 10 percent lower cost to provide similar services to students as can be offered in the replacement of buildings designed to accommodate individualized instruction.

e. Using the model developed and evaluated, the participants will present it to the superintendents and/or their designated staff in the four metropolitan Atlanta systems for use in the development of an individualized instructional program systemwide.

SITE

This practicum was developed and field-tested in four metropolitan Atlanta school districts: Atlanta City, Cherokee County, DeKalb County, and Forsyth County. Each participant involved implemented one of the packets in an area of the school he administers.

POPULATION

The faculties and student bodies in eight elementary and high schools were either directly or indirectly affected by this practicum. Those schools have approximately 500 teachers and more than seven thousand students.

PARTICIPANTS

Eight Nova participants in the Atlanta Cluster were involved in developing and implementing this practicum. Each participant is currently employed as principal of a school located in one of the metropolitan Atlanta school districts.
PACKETS DEVELOPED

Based on results of a survey of 30 school administrators, the following packets have been developed and are included:

1. A Plan to Reorganize a Traditional Classroom to Enhance Individualized Instruction Within The Classroom.
2. A Plan to Demonstrate How Portable Partitions can be Used to Accommodate Individualized Instruction.
3. A Plan to Relocate and/or Reorganize Media Centers to Expand and/or Facilitate Individualized Instruction.
4. A Plan to Utilize Mobile, Multiple-Use Furniture to Facilitate and Accommodate Individualized Instruction.
5. A Plan to Demonstrate How School Corridors can be Altered to Accommodate Individualized Instruction.
EVALUATION

QUESTIONNAIRE (Special Objective 2a)

In an effort to identify some ways to reorganize a traditional school plant into a flexible structure that will facilitate individualized instruction, a 20-item questionnaire was developed by the eight participants. The questionnaire was then randomly distributed to 30 administrators (10 percent) from four metropolitan Atlanta area school districts (Atlanta City, Cherokee County, DeKalb County, and Forsyth County). They were asked to rank the 20 items from most important to least important in relation to individualizing instruction in the schools they administer. Twenty-five of the 30 administrators returned the questionnaire. This constituted an 83 percent return.

The five most important items, as ranked by the 25 administrators, were selected as areas for further study. The five areas selected were:

1. A plan to reorganize a traditional classroom to enhance individual instruction within the classroom.
2. A plan to demonstrate how portable partitions can be used to accommodate individualized instruction.
3. A plan to relocate and/or reorganize media centers to expand and/or facilitate individualized instruction.
4. A plan to utilize mobile, multiple-use furniture (e.g. bookcases, study carrels) to facilitate and accommodate individualized instruction.
5. A plan to demonstrate how school corridors can be altered to accommodate individualized instruction.

An example of the questionnaire, and a more detailed account of the results are contained in Appendix A, Exhibit 1.

PACKET DEVELOPED (Special Objective 2b)

Using the five highest items from the questionnaire and from a search of literature, the eight participants decided to develop self-teaching learning packets for each of the five areas, (traditional classroom, portable partitions, media centers, mobile furniture, and corridors). The objectives of each packet were:

1. To modify learning areas.
2. To support individualized instruction.

The initial packets were developed by the participants as follows:

1. Within the Traditional Classrooms
   Sidney B. Horne and Mildred L. Walton
2. Portable Partitions
   Edwin R. Casey and John E. Mobley
3. Media Center
   J. Wesley Hardy and Billie F. Smith
4. Mobile Furniture
   John P. Nichols and James D. Turpin
5. Corridors
   Edwin R. Casey, J. Wesley Hardy, Sidney B. Horne, John E. Mobley, John P. Nichols, Billie F. Smith, James D. Turpin, and Mildred L. Walton
The initial results were reviewed by all participants and suggested changes were made. Using the revised packets, each participant selected a packet to implement (field-test). All five packets were field-tested.

**PACKET IMPLEMENTATION (Special Objective 2c)**

In accordance with the purpose of the practicum, each participant implemented the packet that had the greatest relevance and practical application to the needs of the school he administers. The exact areas of implementation by participants are listed below:

1. Edwin R. Casey implemented a combination of all packets in exploring a plan for the modification of the school auditorium to provide for additional learning space.
2. J. Wesley Hardy implemented the Media Center Packet.
3. Sidney B. Horne implemented the Within the Traditional Classroom Packet.
4. John E. Mobley implemented the Movable Partitions Packet.
5. John P. Nichols implemented the Mobile Furniture Packet.
7. James D. Turpin implemented the Mobile Furniture Packet.
8. Mildred L. Walton implemented the Corridors Packet.

Report of implemented packets are contained in Appendix A, Exhibits 2, 3, 4, 5, 6, 7, 8, and 9.
Strengths that surfaced in the implementation of the packets are summarized in Appendix A, Exhibit 10-A. These data revealed that all persons who implemented and evaluated the packets responded positively to the six items on the checklist. These responses indicated 100 percent agreement that the implementers made a serious effort to use the objective-coded activities to make modifications in existing school buildings to enhance and facilitate individualized instruction.

Comments were made relative to the manner in which the implemented packet facilitated and improved individualized instruction. The two most pervasive commendations were that the packets:

1. Forced implementers to assess the existing facilities and equipment before and after using the suggested strategies.
2. Provided additional, or better, arrangement of space and equipment to meet the cognitive and affective needs of individual students.

(See Appendix A, Exhibits 2, 3, 4, 5, 6, 7, 8, and 9 for a detailed account of each implementation report.)

COST ANALYSIS (Special Objective 2d)

For the purpose of comparing the cost of implementing the packet(s) developed with the cost of the replacement of buildings (new construction) as related to the facilitation of individualized instruction, the participants decided to use the three packets ranked as most important by the randomly-sampled school administrators on the initial questionnaire.
Considerably more than a 10 percent savings resulted from the implementation of the Portable Partition Packet, the Media Packet, and the Within the Traditional Classroom Packet, as compared to new facilities in these areas.

A detailed chart is contained in Appendix A, Exhibit 10.

SPECIALIZED PROFESSIONAL PERSONNEL (Special Objective 2e)

Throughout the practicum, a continuous evaluation was conducted using professional consultants from metropolitan Atlanta area school systems. See Appendix A, Exhibit 11 for a complete list of persons consulted.

Each learning area where the packets were implemented was evaluated by a random sample of students and teachers using instruments developed by the participants. Eighty-one percent of students, and 90 percent of teachers indicated improvements in the modified learning areas as a result of the packet implementations.

An example of the instruments used and a more detailed report of the results are included in Appendix A, Exhibits 12, 13, and 14.

The final model was presented to the superintendents and/or their designated staff person in the four metropolitan Atlanta school systems where the packets were field-tested. Each reviewer was asked to determine the potential use of the packets in his school system to modify learning areas and to support individualized instruction.
Each reviewer indicated the model would be considered for implementation on a voluntary basis or that it would be studied further for the purpose of implementation.

ADMINISTRATORS' EVALUATION

The thirty administrators in the original sample reviewed the completed model and responded to an Administrators' Evaluation Questionnaire developed by the practicum participants (see Exhibit 15). The response rate for the administrator sample was 100 percent. The percent of respondents selecting the "high" rating was calculated (see Table 1). The percentages were then ranked from one to five. The rank shows the shifting value relativity from plan to plan.

TABLE 1

Responses of Administrator Sample: Percent of "High" Value and Rank

<table>
<thead>
<tr>
<th></th>
<th>Number</th>
<th>Percent</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Classrooms</td>
<td>25</td>
<td>83*</td>
<td>3.5</td>
</tr>
<tr>
<td>2. Partitions</td>
<td>26</td>
<td>87*</td>
<td>2</td>
</tr>
<tr>
<td>3. Media Centers</td>
<td>28</td>
<td>93*</td>
<td>1</td>
</tr>
<tr>
<td>4. Furniture</td>
<td>25</td>
<td>83*</td>
<td>3.5</td>
</tr>
<tr>
<td>5. Corridors</td>
<td>24</td>
<td>80*</td>
<td>4</td>
</tr>
</tbody>
</table>
For example, among the thirty administrators the average percentage rating "high" across the five plans for modifying school plants to accommodate individualized instruction was 87 percent. That is, on the average, 26, or 87 percent, of the group rated the five plans as "high" in value. However, 28, or 93 percent, of the group gave the "media center reorganization" plan a "high" rating. An inspection of the value assigned to the plan for "arranging traditional classrooms" and the plan to "utilize mobile, multiple-use furniture" disclosed that 25, or 83 percent, of the respondents gave both plans a "high" rating for their practical application. Twenty-six administrators, or 87 percent, indicated the plan for the "utilization of portable partitions, has "high" adaptability. The value placed upon the plan to demonstrate "how school corridors can be altered" was somewhat lower. However, 24 respondents, or 80 percent, determined that the plan exhibited "high" potentiality for enhancing individualized instruction. A more detailed disclosure of these data is included in Appendix A, Exhibits 16 through 20.

It is not surprising that 100 percent of the respondents indicated a "desire" to implement the plans in their schools because all five plans received "high" ratings. The data further disclosed that while only 13 percent of the administrators plan immediate implementation
of the entire five-packet model, 87 percent plan to implement one or more packets immediately (see Exhibit 23). Moreover, each respondent plans "to study" the model to determine future implementation possibilities.

CONSULTANTS' EVALUATION

Five of the 10 consultants, listed in Exhibit 11 of the Evaluation section of the practicum report, were assigned one completed packet each to assess its potential application to the instructional program of his school district. Although one consultant questioned the potential application of the packet he evaluated to the instructional program of the school district in which he works, the remaining four consultants determined that the packets they evaluated were highly applicable, and that they would impact positively upon the instructional programs in their districts. It should be pointed out that the goal of the packets was to enhance the individualization process by making minimal, cost-effective modifications in existing facilities. It was not intended to devise a plan for complex modifications and extensive new construction. Besides, the positive evaluations from the other four consultants represents an 80 percent approval which appears to be worthy of further exploration and analysis.

A summary of the consultants value ratings is included in Appendix A, Exhibit 22.
INSTITUTIONALIZATION OR FURTHER IMPLEMENTATION OF THE PRACTICUM

There are many ways in which this model and individual packets of the model will be useable and profitable in reorganizing traditional school plants for individualized instruction. Institutionalization, or further implementation of the practicum, was supported by the observers, as indicated in letters sent directly to Nova University. Some specific comments related to the implementation of the model were that it:

1. Can provide invaluable input from the building level.
2. Causes administrators and teachers to think and plan carefully for change.
3. Forces administrators to become a real part of change.
4. Will make the model available to all school administrators.
5. Can be used effectively for reorganizing traditional school plants for the purpose of individualized instruction.

The consultants related that the model has high institutionalization value as reflected in the responses summarized in Exhibit 22. One consultant suggested that the model might become a substantive module in administration courses at the university level.

Along this same line of reasoning, as well as to provide further proof of efficacy of the model, each of the eight participants implemented one packet in his school (see Exhibits 2 through 9).
Furthermore, the participants are committed to insuring pervasive institutionalization through: (1) personal contact with fellow administrators and professional associates; (2) project schools as visitation resources in the Metro-Atlanta area; and (3) the formation of a consultant team to conduct in-service programs locally, state-wide, and nationally.
FOLLOW-UP

In the course of this practicum, each participant was concerned with field-testing the model by implementing the packet within a specified learning area. As a follow-up, each person involved will continue to use the developed packets as needed to reorganize his building to accommodate individualized instruction.

In addition, the results of this study will be made available to the following individuals, groups, and departments:

1. Local school principals
2. Local classroom teachers
3. Local and state school superintendents
4. Area colleges and universities
5. State School Building Authority personnel
6. Local school building planners
7. Local architectural firms
8. National school administrators' organizations
APPENDIX

EXHIBITS 1 THROUGH 23
Fellow Administrator:

Please take a few minutes to assist in the examination of a current educational concern.

This study is being conducted by a group of school administrators in the metropolitan Atlanta area. The purpose is to identify possible adaptations of existing school plants to accommodate individualization of instruction.

From this study, a model will be developed which will assist school administrators in making decisions regarding the use of facilities.

Results of the findings will be available upon request.
QUESTIONNAIRE

Taking the following list, please rank each item from 1 to 20, assigning 1 to the most important and 20 to the least important. Consider the feasibility of each item for individualizing instruction in your school.

Rank

1 A plan to reorganize a traditional classroom to enhance individual instruction within that classroom.

13 A plan to demonstrate how existing non-load bearing walls can be removed to provide open space.

15 A plan to demonstrate how existing doors and exits can be arched to provide open space.

2 A plan to demonstrate how portable partitions can be used to accommodate individualized instruction.

10 A plan to demonstrate how existing gymnasium space can be used to expand and/or facilitate individualized instruction.

11 A plan to demonstrate how existing school auditoriums can be used to expand and/or facilitate individualized instruction.

8 A plan to demonstrate how existing storage space can be used to expand and/or facilitate instruction.

6 A plan to demonstrate how to utilize open court areas to facilitate and/or accommodate individualized instruction.
3 A plan to relocate and/or reorganize media centers to expand and/or facilitate individualized instruction.

7 A plan to demonstrate how cafeterias can be altered or reorganized to expand and/or facilitate individualized instruction.

5 A plan to demonstrate how school corridors can be altered to accommodate individualized instruction.

19 A plan to demonstrate how clinic areas can be altered to accommodate individualized instruction.

9 A plan to demonstrate how existing stage areas can be utilized and/or expanded to facilitate individualized instruction.

17 A plan to demonstrate how existing dressing areas can be utilized and/or expanded to facilitate individualized instruction.

16 A plan to demonstrate how existing office space can be utilized and/or reorganized to accommodate individualized instruction.

18 A plan to demonstrate how custodial areas can be utilized and/or reorganized to accommodate individualized instruction.

14 A plan to demonstrate how teachers' lounges can be utilized and/or reorganized to accommodate individualized instruction.

12 A plan to demonstrate how existing covered areas can be utilized to facilitate individualized instruction.

4 A plan to utilize mobile, multiple-use furniture (e.g. bookcases, study carrels) to facilitate and accommodate individualized instruction.

20 Other. (Please describe)
EXHIBIT 2

REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: Edwin R. Casey

2. Packet implemented: A combination of all packets was used in exploring a plan for the modification of the school auditorium to provide for additional learning space.

3. School where implemented: Cherokee High School, Cherokee County School System, Canton, Georgia 30114

4. Dates of implementation: From March 29, 1975 To April 26, 1975

5. Rationale: Assessment of the auditorium's present uses, and the development of a modified plan for improvement are the reasons for implementing the packets.

6. Procedures followed:

   Human resources used:

   Number of teachers involved: One principal, four division heads, 11 department heads, one librarian, and two paraprofessionals

   Number of students involved: 750 students will be directly involved while the entire 2250 student body will be indirectly affected.

   Others involved (list area of involvement and number involved):

   Two building employees as custodians. One additional certified media aide specialist will be employed. One architect.
Physical resources used (list):

- Movable furniture
- Cassette players
- Study carrels
- Movable partitions
- Projector and screen
- Auditorium seat chair arm
- Learning tables
- Golf cart for transporting
- Books shelves, magazine racks, and books

Methods of implementations (describe briefly steps taken in implementing the packet):

1. Discuss, plan, and obtain permission from system superintendent
2. Make pro-assessment of present use of auditorium
3. Make survey of present physical facilities of auditorium
4. List possible ways to use auditorium as learning space
5. List changes necessary in order to accommodate and support individualized instruction in the auditorium area
6. Analyze all data with affected personnel
7. Final report written using the plan for implementing packet

Cost Analysis:

- Actual money spent:
  - Audio-visual equipment: $1,183.00
  - Study carrels: 488.40
  - Book shelves: 400.00
  - Cabinets: 300.00
  - Display boards: 400.00

Hidden costs (list): The hidden cost consists of the use of personnel's time and materials and supplies already in stock.

1. Desks
2. Tables and chairs
3. Media materials and supplies
8. Evaluation:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The packet followed through on stated objectives.</td>
<td>X</td>
</tr>
<tr>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
</tr>
<tr>
<td>Sufficient and valid information was gathered as a result of the packet implementation.</td>
<td>X</td>
</tr>
<tr>
<td>Sound conclusions were drawn as a result of implementation of the packet.</td>
<td>X</td>
</tr>
<tr>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
</tr>
<tr>
<td>A final report of implementation was presented.</td>
<td>X</td>
</tr>
</tbody>
</table>

Comments:

The implementation of the learning packets has facilitated or improved individualized study and instruction by providing:

1. An assessment of the quality and flexibility of the facilities in the auditorium.
2. The identification of ways the auditorium was being used.
3. Data to assist in making changes in the use of the auditorium or additional learning space.
IMPLEMENTATION OF PACKETS
ENHANCES INDIVIDUALIZED LEARNING
IN THE CHEROKEE HIGH AUDITORIUM

Study Hall Serves as Satellite Media Center

Carrels Provide Independent Study Space

Audio-Visual Area

Small Tables Provide for Student Tutorial Program
EXHIBIT 3
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: J. Wesley Hardy

2. Packet implemented: A plan to relocate and/or facilitate individualized instruction

3. School where implemented: Columbia High School, DeKalb County School System, Decatur, Georgia

4. Dates of implementation: From March 29, 1975 to April 26, 1975

5. Rationale: It is possible to assess the media center, analyze spaces and functions in the center, consider rearranging space, demonstrate ability to improve the present center by use of the packet, and show how the packet accommodates and supports individualized instruction.

6. Procedure followed:

   Human resources used:
   Number of teachers involved: Two librarians and two reading specialists
   Number of students involved: 24 (audio-visual student assistants and library aides)
   Others involved (list area of involvement and number involved):
   One media coordinator (paraprofessional)
   One secretary (assigned to media center)
   One reading paraprofessional (assigned to reading center portion of media center)

   Physical resources used (list):
   Media center Workroom Two reading lab
   Library Conference room rooms
   Audio-visual storage room Periodicals room
Methods of implementations (describe briefly steps taken in implementing the packet):

1. The area to be considered was identified.
2. An assessment was made of the facility as to its adequacy and present use by students and teachers.
3. Persons working in the area were conferred with to get their input and views of the present media center.
4. Recent media center standards were reviewed to obtain criteria for comparison and evaluation of the present media center.
5. The packet was presented to the media center personnel to provide information about the present media center and available material and equipment now present there. Also, information about the present use of the center as to full use and as to appropriate use and suggestions relevant to use was obtained.

7. Cost Analysis:

Actual money spent: Paper, stencils, and supplies $10.00
Film and flashbulbs 9.87
Gasoline to visit co-worker on this plan 6.00

Hidden costs (list): Time of participant 20 hours
Secretarial time (to type) 4 hours
Time of media center personnel 16 hours
Time of reading center personnel 4 hours
8. Evaluation:


The packet followed through on stated objectives

A serious and sufficient effort was made to implement packet.

Sufficient and valid information was gathered as a result of the packet implementation.

Sound conclusions were drawn as a result of implementation of the packet.

The packet was evaluated on the basis of appropriate criteria.

A final report of implementation was presented.

Comments:

The implementation of the learning packets has facilitated or improved individualized study and instruction by providing:

1. An assessment of the present use of available equipment and existing media center.

2. A review of the present media center equipment, space, possible functions (and present functions) and learning environment.

3. Compiled data from this report to aid in improvement for the future. Also, ideas that came to participant, and those helping in survey, were filed for future information.
INDIVIDUALIZED LEARNING IN THE MEDIA CENTER AT COLUMBIA HIGH SCHOOL

Students Use Reading Machines

Students Improve Reading Skills

Media Specialists Teach Students To Operate Machines

Card Catalog Helps Students In Independent Study

Audio-Visual Equipment Supplements Classroom Work
EXHIBIT 4
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: Sidney B. Horne
2. Packet implemented: a classroom
3. School where implemented: Northwoods Elementary School, DeKalb County, Georgia
4. Dates of implementation: From March 29, 1975 To April 26, 1975
5. Rationale: Individualized instruction may be carried out within a regular classroom with minimal modification of space.
6. Procedure followed:

   Human resources used:
   Number of teachers involved: One
   Number of students involved: 39
   Others involved (list area of involvement and number involved):
   The school principal, the gifted coordinator, the media specialist, two volunteer parents, a carpenter, each of the 39 students, and the custodian.

   Physical resources used (list):
   Old door and scrap lumber used to construct study carrels and shelf dividers; old folding chairs repainted bright colors; donated carpet remnants, and donated wallpaper and paint.

   Methods of implementation (describe briefly steps taken in implementing the packet):
   A regular classroom was selected for use by the "discoveries class" (for gifted); a joint planning session was held with the people concerned to determine needs; a carpenter was enlisted to construct study carrels and
divider shelves; old folding chairs were repainted bright colors
and wallpaper was applied to the shelving; teacher-made centers
were constructed; pre and post-assessments were made following
the packet instructions.

7. Cost Analysis:
Actual money spent: None. Everything was either available at school
or was donated.
Hidden costs (list): Hidden costs were very little and would be mostly
for personnel time. Four cans of spray paint at
about $1.50 per can; carpet remnants, wallpaper,
and scrap lumber were of no direct cost to the
school.

8. Evaluation:

<table>
<thead>
<tr>
<th>The packet was followed through on stated objectives.</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sufficient and valid information was gathered as a result of the packet implementation.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sound conclusions were drawn as a result of implementation of the packet.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A final report of implementation was presented.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>
Comments:

Implementation of the learning packet has facilitated or improved individualized instruction by providing:

1. Assessment of classroom space for use as individual learning areas.
2. Identification of areas suitable for individual learning space.
3. Data to assist in converting classroom space to individual learning areas.
4. The identification of furniture or equipment needed for use in learning areas.
5. Suggestions that helped the author revise the content of the learning packet.
INDIVIDUALIZING INSTRUCTION
IN CLASSROOM
AT NORTHWOODS SCHOOL

Cafeteria Used as Learning Center

Video News Program Prepared in Corner

Study Carrels Provide Independent Study

Fun Center Provides Chess or Reading

Dishpans Provide Individual Storage
EXHIBIT 5
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: John E. Mobley

2. Packet implemented: movable partitions

3. School where implemented: DeKalb Open Campus High School, DeKalb School System, DeKalb County, Georgia

4. Dates of implementation: From March 29, 1975 To April 26, 1975

5. Rationale: Objective in packet plus the revision of the contents of the packet.

6. Procedure followed:

   Human resources used:

   Number of teachers involved: John E. Mobley and 24 teachers

   Number of students involved: 500

   Others involved (list area of involvement and number involved):

   Instructional coordinators, custodians, maintenance repairmen, and parents

   Physical resources used (list):

   The physical plant, materials, and equipment at the DeKalb Open Campus High School.

   Methods of implementations (describe briefly steps taken in implementing the packet):

   See attachment
7. Cost Analysis:

Actual money spent:

<table>
<thead>
<tr>
<th>Project Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art room renovation - materials</td>
<td>$269.81</td>
</tr>
<tr>
<td>Reading cubicle - materials</td>
<td>88.40</td>
</tr>
<tr>
<td>English room - materials</td>
<td>52.96</td>
</tr>
<tr>
<td>Labor for all projects</td>
<td>1,115.77</td>
</tr>
</tbody>
</table>

Hidden costs (list):

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director's time</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Teachers' time</td>
<td>1,000.00</td>
</tr>
<tr>
<td>Custodians' time</td>
<td>500.00</td>
</tr>
</tbody>
</table>

8. Evaluation:

<table>
<thead>
<tr>
<th>Statement</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The packet followed through on stated objectives.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Sufficient and valid information was gathered as a result of</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>the packet implementation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound conclusions were drawn as a result of implementation of</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>the packet.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>A final report of implementation was presented.</td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

61
Comments:

The implementation of the learning packet has facilitated or improved individualized instruction by providing:

1. More open space.
2. More individual space.
3. More movement of materials and equipment.
4. More planning for instruction.
5. More student involvement and participation.
In order to provide more space, the wall between the art room and another classroom was removed. Movable partitions have been ordered to close the opening when necessary.

An opening was made to give the Humanities teacher access to the art room. Double doors provide privacy when necessary.
The library is located between two wings of a building. Bookcases were moved and placed side by side to control traffic and reduce noise.

Surplus language laboratory tables were salvaged and put to use in the reading laboratory.

An example of how one teacher created individualized study areas with the use of discarded plywood.
EXHIBIT 6
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: John P. Nichols

2. Packet implemented: mobile furniture

3. School where implemented: Chestatee Elementary School, Forsyth County School System, Forsyth County, Georgia

4. Dates of implementation: From March 29, 1975 To April 26, 1975

5. Rationale: The mobile furniture packet was utilized to modify a learning area for the purpose of supporting individualized instruction. The central portion of an open-space area was converted into a reading area, through the use of mobile furniture.

6. Procedure followed:
   Human resources used:
   Number of teachers involved: Reading teacher (1)
   Number of students involved: Second through fourth grade reading students (75)
   Others involved (list area of involvement and number involved):
   Instructional aide (1)
   Custodial (1), maintenance (1)
   Principal (1)

   Physical resources used (list):
   Central portion of open space area
   Dividers (serving separational and instructional purposes)
   Portable chalkboards (also served as divider)
Methods of implementations (describe briefly steps taken in implementing the packet):

1. identification of area to be used
2. orientation and planning session involving reading teacher, reading aide, and principal
3. data collected, using learning packet
4. data analyzed
5. furniture and equipment were set up
6. pre and post-assessments were made
7. procedures outlined in the packet were followed

7. Cost Analysis:
   Actual money spent: paint, varnish, brushes, etc. $29.00
   contact paper 8.00
   total $37.00

   Hidden costs (list): all furniture was available (valued at $850.00)
   professional time: 20 hours 150.00
   non-professional time: 35 hours 105.00
   total hidden costs $1,105.00
8. Evaluation:

The packet followed through on stated objectives. X

A serious and sufficient effort was made to implement packet. X

Sufficient and valid information was gathered as a result of the packet implementation. X

Sound conclusions were drawn as a result of implementation of the packet. X

The packet was evaluated on the basis of appropriate criteria. X

A final report of implementation was presented. X

Comments:

Implementation of the packet has enhanced the individualization of instruction by providing:

1. data to assist in making changes in the use of mobile furniture.
2. information that helped the authors to revise the content of the packet.
3. information that helped the participant convert an open space area into a reading area through the use of mobile furniture.
MOBILE FURNITURE PACKET ENHANCES INSTRUCTION AT CHESTATEE ELEMENTARY

Portable Furniture Enhances Learning

Room Divider Provides Setting for Book Check-out

Portable Dividers Provide Individualized Learning Opportunities

Student Desks Arranged for Small Group Activity
EXHIBIT 7
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: James D. Turpin

2. Packet implemented: mobile furniture

3. School where implemented: Evansdale Elementary School, DeKalb County, Georgia. Evansdale has 29 regular classrooms, a cafeteria, a library, and several other learning areas (48,000 square feet). There are 604 students in grades one through seven.

4. Dates of implementation: From March 29, 1975 To April 26, 1975

5. Rationale: Assessment of the quantity of mobile furniture, the present uses, and the development of a long-range plan for improvement were the purposes of the implementation of the packet. Also, the results were used to revise the content of the packet.

6. Procedure followed:

   Human resources used:

   Number of teachers involved: Two teachers were directly involved - a fourth grade teacher and a resource teacher for the gifted students. The librarian and the principal were also directly involved.

   Number of students involved: About 604 students were affected by the implementation of the packet.

   Others involved (list area of involvement and number involved):

   Approximately 32 other teachers and building employees were indirectly involved in the implementation of the packet.
Physical resources used (list):
The following physical resources were used: all mobile furniture in the building, each regular classroom in the building, and each learning area in the building.

Methods of implementations (describe briefly steps taken in implementing the packet):
The following procedures were utilized during the implementation of the packet:
1. orientation and planning session involving two teachers, one librarian, and one principal
2. data collected, using learning packet
3. data analyzed
4. final report written, using the Plan for Implementing Packet developed by the Maxi I total committee

Cost Analysis:
Actual money spent: none
Hidden costs (list): The hidden cost was quite high due to the use of personnel time and materials and supplies in stock.
8. Evaluation:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The packet followed through on stated objectives.</td>
<td>X</td>
</tr>
<tr>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
</tr>
<tr>
<td>Sufficient and valid information was gathered as a result of the packet implementation.</td>
<td>X</td>
</tr>
<tr>
<td>Sound conclusions were drawn as a result of implementation of the packet.</td>
<td>X</td>
</tr>
<tr>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
</tr>
<tr>
<td>A final report of implementation was presented.</td>
<td>X</td>
</tr>
</tbody>
</table>

Comments:
The implementation of the learning packet has facilitated or improved individualized instruction by providing:

1. an assessment of the quantity of mobile furniture in the building.
2. the identification of the ways the mobile furniture was being used.
3. data to assist in making changes in the use of mobile furniture.
4. the identification of future mobile furniture needs.
5. suggestions that helped the authors revise the content of the learning packet.
PORTABLE FURNITURE SUPPORTS INDIVIDUALIZED INSTRUCTION AT EVANSDALE SCHOOL

Room dividers serve as storage space.

A portable divider provides display space.

Space for independent study.

Room dividers serve as learning centers.
EXHIBIT B
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3)

1. Participant involved: Mildred L. Walton

2. Packet implemented: Corridors

3. School where implemented: Margaret Fain, Atlanta Public School System,
   Atlanta, Georgia, Borah W. Walton, Principal

4. Dates of implementation: From March 29, 1975 To April 26, 1975

5. Rationale: It seems feasible to utilize idle spaces to facilitate
   independent study and the youth-tutoring-youth program that is being
   implemented in the school.

6. Procedures followed:

   Human resources used:

   Number of teachers involved: four

   Number of students involved: 25

   Others involved (list area of involvement and number involved):
   six high school students

   Physical resources used (list):
   Hallway
   Student desks

   Methods of implementations (describe briefly steps taken in implementing
   the packet):
   Followed suggestions outlined in the Corridors packet
7. Cost Analysis:

Actual money spent: none
Hidden costs (list): none

8. Evaluation:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The packet followed through on stated objectives.</td>
<td>X</td>
</tr>
<tr>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
</tr>
<tr>
<td>Sufficient and valid information was gathered as a result of the packet implementation.</td>
<td>X</td>
</tr>
<tr>
<td>Sound conclusions were drawn as a result of implementation of the packet.</td>
<td></td>
</tr>
<tr>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
</tr>
<tr>
<td>A final report of implementation was presented.</td>
<td></td>
</tr>
</tbody>
</table>

Comments:
From observation, students were busily engaged in individual projects, tutoring by youth tutors, and small clusters with teachers.
CORRIDORS SUPPORT INDIVIDUALIZED INSTRUCTION

AT

MILES SCHOOL

A Tutor Works With a Small Group

Teaching Machines Used in Corridors

Children Read a Play in Corridor

Display Learning Centers in Corridors
EXHIBIT 9
REPORT OF PACKET IMPLEMENTATION
(OBJECTIVE 3).

1. Participant involved: Billie F. Smith

2. Packet implemented: Media Center

3. School where implemented: Medlock Elementary School, DeKalb County School System, Decatur, Georgia. Medlock School has 19 classroom teachers, three special area teachers, principal, secretary, and 512 students.

4. Dates of implementation: From March 29, 1975 To April 26, 1975

5. Rationale: Assessment of the environment, space, equipment, and functions of the media center, and the development of a long-range plan for improvement are the purposes of the implementation of the packet.

6. Procedures followed:

   Human resources used:

   Number of teachers involved: The librarian, the principal, and one teacher were directly involved. The complete staff was affected by the implementation of the packet.

   Number of students involved: 512 students were affected by the implementation of the packet.

   Others involved (list area of involvement and number involved):

   25 parents were involved as media center assistants.

   Physical resources used (list):

   The following physical resources were used: all AV equipment in the building, the present library facilities, one additional classroom, and one office space.
Methods of implementations (describe briefly steps taken in implementing the packet):

The following procedures were utilized during the implementation of the packet: (1) orientation and planning session librarian, one teacher, principal, and parents; (2) data collected, using packet; (3) data were analyzed; (4) final report written, using the "Plan for Implementing Packet" developed by the Maxi I practicum participants.

7. Cost Analysis:

Actual money spent: The following items were purchased:

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>study carrels</td>
<td>$358.00</td>
</tr>
<tr>
<td>slide projector remotely controlled</td>
<td>199.00</td>
</tr>
<tr>
<td>10 filmstrip viewers @ $29.50/each</td>
<td>295.00</td>
</tr>
<tr>
<td>dry mount press</td>
<td>132.00</td>
</tr>
<tr>
<td>visual maker</td>
<td>195.00</td>
</tr>
</tbody>
</table>

Hidden costs (list): Use of personnel time; use of materials and supplies in stock; use of parents' time – these items make the hidden cost high.
8. Evaluation:

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>The packet followed through on stated objectives.</td>
<td>X</td>
</tr>
<tr>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
</tr>
<tr>
<td>Sufficient and valid information was gathered as a result of the packet implementation.</td>
<td>X</td>
</tr>
<tr>
<td>Sound conclusions were drawn as a result of implementation of the packet.</td>
<td>X</td>
</tr>
<tr>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
</tr>
<tr>
<td>A final report of implementation was presented.</td>
<td>X</td>
</tr>
</tbody>
</table>

Comments:

The implementation of the media center packet has facilitated or improved individualized instruction by providing:

1. an assessment of the environment, space, equipment, and functions of the media center.
2. the identification of the ways the equipment and media center were being used.
3. data to assist in making changes in the use of the media center.
4. the identification of media center needs, and the development of a proposed plan for improvement to be installed during the 1975-76 school year.

5. suggestions that helped the authors revise the content of the media center packet.
THE MEDIA CENTER SUPPORTS INDIVIDUALIZED INSTRUCTION
AT
MEDLOCK SCHOOL

Independent Study
in a
Quiet Corner

Desks Placed
Back-to-Back

Study Carrels Provide
Independent Learning
Space

Learning at His
Own Pace
EXHIBIT 10

COST ANALYSIS CHART

*NEW CONSTRUCTION

PORTABLE PARTITIONS

Within the Traditional Classroom

Portable Partitions

PORTABLE PARTITIONS

Portable Partitions

$ 27,216.00

5,652.50

1,526.94

4602.41

MORE THAN 10% SAVINGS

Yes

Yes

Yes

Cost of new construction for one classroom or one media center.

Cost to modify one regular classroom or one media center.

Within the Traditional Classroom

Portable Partitions

PORTABLE PARTITIONS

Portable Partitions

$ 150.00

1,526.94

-602.43

104,915.40

Yes

Yes

Yes

Cost of new construction for one classroom or one media center.

Cost to modify one regular classroom or one media center.

Within the Traditional Classroom

Portable Partitions

PORTABLE PARTITIONS

Portable Partitions

$ 27,216.00

5,652.50

1,526.94

4602.41

MORE THAN 10% SAVINGS

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Cost to modify one regular classroom or one media center.

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PORTABLE PARTITIONS

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1,526.94

-602.43

104,915.40

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1,526.94

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Cost to modify one regular classroom or one media center.

Within the Traditional Classroom

PORTABLE PARTITIONS

Portable Partitions

PORTABLE PARTITIONS

Portable Partitions

$ 150.00

1,526.94

-602.43

104,915.40

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Cost to modify one regular classroom or one media center.

Within the Traditional Classroom

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Portable Partitions

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4602.41

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Cost to modify one regular classroom or one media center.

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PORTABLE PARTITIONS

Portable Partitions

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1,526.94

-602.43

104,915.40

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Cost of new construction for one classroom or one media center.

Cost to modify one regular classroom or one media center.

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Portable Partitions

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Cost to modify one regular classroom or one media center.

Within the Traditional Classroom

PORTABLE PARTITIONS

Portable Partitions

PORTABLE PARTITIONS

Portable Partitions

$ 150.00

1,526.94

-602.43

104,915.40

Yes

Yes

Yes

Cost of new construction for one classroom or one media center.

Cost to modify one regular classroom or one media center.
## EXHIBIT 10-A

### SUMMARY OF PACKET EVALUATIONS

<table>
<thead>
<tr>
<th></th>
<th>WITHIN THE CLASSROOM</th>
<th>MOBILE PARTITIONS</th>
<th>MEDIA CENTER</th>
<th>MOBILE FURNITURE</th>
<th>CORRIDORS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
<td>NO</td>
<td>YES</td>
</tr>
<tr>
<td>1.</td>
<td>The packet followed through on stated objectives.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2.</td>
<td>A serious and sufficient effort was made to implement packet.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3.</td>
<td>Sufficient and valid information was gathered as a result of the packet implementation.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>4.</td>
<td>Sound conclusions were drawn as a result of implementation of the packet.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>5.</td>
<td>The packet was evaluated on the basis of appropriate criteria.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6.</td>
<td>A final report of implementation was presented.</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
EXHIBIT 11

CONSULTANTS

1. Dr. William Adams, Assistant Superintendent for Planning and Development - Provided written materials and delineated ways packets might be beneficial to on-going, broad renovation programs.

2. Mr. Wilbrun Adams, Associate Superintendent of Business Services - Approved practicum design and provided access to subordinate personnel.

3. Mr. Melvin Davis, Department of Facilities and Construction - Assisted in determining practical areas of practicum application.

4. Dr. Arthur Dexter, Department of Planning, DeKalb County School System - Offered suggestions relative to the manner by which the practicum design could be used to complement existing school plants. Contributed printed materials, made a referral to the University of Tennessee for additional resources, and offered to review the model once it is finalized.

5. Mr. Victor Grantham, Department of Plant Operations, DeKalb County School System - Gave advice to the committee regarding maintenance and custodial services necessary to keep school plants clean and operational.

6. Ms. Helen C. Greear, School Facility Planner for Pioneer Cooperative, Education Service Agency, Cleveland, Georgia - Shared information and ideas concerning renovating existing facilities to improve their effective use; designing interior innovations; and, writing furniture specifications.
7. Dr. James Hinson, Superintendent of Schools, DeKalb County Schools - Met with Nova participants, offered advice, and approved practicum design.

8. Dr. Donald Schultz, Assistant Superintendent for Instructional Services, DeKalb County Schools - Met with participants and gave procedural advice.


10. Dr. Darwin W. Womack, Assistant Superintendent, Atlanta Public School System, Director of Facilities Services Division - Provided filmstrips of school plants, spanning several years, as documentation of changes in designs, facilities, and cost of construction.
EXHIBIT 12
CHECKLIST FOR STUDENT EVALUATION
OF LEARNING AREA

Directions:
Read each sentence. Place X under yes if the statement is true in your learning area. Place X under no if it is not true in your learning area.

In my learning area it is easy for me to:

1. Get to my seat. YES NO
2. Look into the faces of my classmates from my seat during group activities. YES NO
3. Work in small groups. YES NO
4. Work in large groups. YES NO
5. Work alone in small work areas. YES NO
6. Have opportunities to place my work in display areas. YES NO
7. Read and use the room resource materials. YES NO
8. Do activities in the learning centers. YES NO
9. Keep samples of my work in a safe place. YES NO
10. Use audio-visual equipment.
   - Record Player YES NO
   - Filmstrips YES NO
   - Listening Stations YES NO
   - Tape Recorder YES NO
   - Tape Player YES NO
### EXHIBIT 12A
**CHECKLIST FOR STUDENT EVALUATION OF LEARNING AREA**

**Directions:**
Read each sentence. Place X under yes if the statement is true in your learning area. Place X under no if it is not true in your learning area.

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>In my learning area it is easy for me to:</td>
<td></td>
</tr>
<tr>
<td>1. Get to my seat.</td>
<td>152</td>
</tr>
<tr>
<td>2. Look into the faces of my classmates from my seat during group activities.</td>
<td>139</td>
</tr>
<tr>
<td>3. Work in small groups.</td>
<td>151</td>
</tr>
<tr>
<td>4. Work in large groups.</td>
<td>121</td>
</tr>
<tr>
<td>5. Work alone in small work areas.</td>
<td>133</td>
</tr>
<tr>
<td>6. Have opportunities to place my work in display areas.</td>
<td>107</td>
</tr>
<tr>
<td>7. Read and use the room resource materials.</td>
<td>139</td>
</tr>
<tr>
<td>8. Do activities in the learning centers.</td>
<td>125</td>
</tr>
<tr>
<td>9. Keep samples of my work in a safe place.</td>
<td>117</td>
</tr>
<tr>
<td>10. Use audio-visual equipment.</td>
<td>147</td>
</tr>
<tr>
<td>Record Player</td>
<td>121</td>
</tr>
<tr>
<td>Filmstrips</td>
<td>111</td>
</tr>
<tr>
<td>Listening Stations</td>
<td>119</td>
</tr>
<tr>
<td>Tape Recorder</td>
<td>116</td>
</tr>
<tr>
<td>Tape Player</td>
<td>112</td>
</tr>
</tbody>
</table>

N=158 students

81% 19%
EXHIBIT 13
CHECKLIST FOR TEACHERS' EVALUATION
OF LEARNING AREAS

Directions:
Read each sentence. Place X under yes if the statement is true in your learning
area. Place X under no if it is not true in your learning area.

In my learning area it is easy for my students to:

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Get to their seat.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Make eye contact with me.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Work in small groups.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Work in large groups.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Work alone in small work areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Place their work in display areas.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Read and use the room resource materials.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Do activities in the learning centers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Keep samples of their work in a safe place.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Use audio-visual equipment.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Record Player</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Filmstrips</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Listening Stations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tape Recorder</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tape Player</td>
<td></td>
</tr>
</tbody>
</table>
EXHIBIT 13A
CHECKLIST FOR TEACHERS' EVALUATION
OF LEARNING AREAS

Directions:
Read each sentence. Place X under yes if the statement is true in your learning area. Place X under no if it is not true in your learning area.

<table>
<thead>
<tr>
<th>In my learning area it is easy for my students to:</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Get to their seat.</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>2. Make eye contact with me.</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>3. Work in small groups.</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>4. Work in large groups.</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>5. Work alone in small work areas.</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>6. Place their work in display areas.</td>
<td>32</td>
<td>4</td>
</tr>
<tr>
<td>7. Read and use the room resource materials.</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>8. Do activities in the learning centers.</td>
<td>31</td>
<td>5</td>
</tr>
<tr>
<td>9. Keep samples of their work in a safe place.</td>
<td>28</td>
<td>8</td>
</tr>
<tr>
<td>10. Use audio-visual equipment.</td>
<td>36</td>
<td>0</td>
</tr>
<tr>
<td>Record Player</td>
<td>33</td>
<td>3</td>
</tr>
<tr>
<td>Filmstrips</td>
<td>29</td>
<td>7</td>
</tr>
<tr>
<td>Listening Stations</td>
<td>29</td>
<td>7</td>
</tr>
<tr>
<td>Tape Recorder</td>
<td>34</td>
<td>2</td>
</tr>
<tr>
<td>Tape Player</td>
<td>33</td>
<td>6</td>
</tr>
</tbody>
</table>

N - 36 Teachers

90% 10%
EXHIBIT 14

SPECIALIZED PROFESSIONAL EVALUATION

(SPECIAL OBJECTIVE 2e)

Directions:
Read each statement. Mark your answer with an X. Make comments in the appropriate space.

1. The abstract provided a general understanding of the study and motivated me to do a more detailed review of the study contents.

2. A similar problem, as described in the Problem Statement section, exists in my school district.

3. The Summary of the Survey of Literature is informative.

4. The field-test results are meaningful.

5. Plans are to:
   A. Fully implement the model.
   B. Implement the model on a pilot basis.
   C. Implement the model on a volunteer basis.
   D. Study further the possibility of implementing the model.

6. Comments:
EXHIBIT 15

ORGANIZING TRADITIONAL SCHOOL PLANS
INDIVIDUALIZED INSTRUCTION
ADMINISTRATORS' EVALUATION

Thank you for your participation in our study to find ways to modify school plants to accommodate individualized instruction. Please review each model and rate its value for possible use to improve the facility-individualized instruction relationship in the building you administer.

1. A Plan for Arranging Traditional Classrooms
   to facilitate the Individualization of Instruction
   Low Value High Value
   1 2 3 4 5

2. A Plan to demonstrate How Portable Partitions
   can be used to Accommodate Individualized Instruction
   1 2 3 4 5

3. A Plan to Relocate or Reorganize Media Centers
   to expand and/or facilitate individualized instruction
   1 2 3 4 5

4. A Plan to utilize Mobile Multiple-Use Furniture to
   facilitate and Accommodate Individualized Instruction
   1 2 3 4 5

5. A Plan to Demonstrate How School Corridors can be
   Altered to Accommodate Individualized Instruction
   1 2 3 4 5

6. Indicate below the action you plan to take:
   YES NO
   a. Implement all five (5) packets listed above
   b. Implement one or more packets
   Check packet or packets:
   Arranging Traditional Classrooms
   Portable Partitions
   Media Center
   Mobile Multiple-Use Furniture
   School Corridors
May or may not have ability of implementing one or more of the packets.
Item 1. A Plan for Arranging Traditional Classrooms to Facilitate the Individualization of Instruction
EXHIBIT 17

GRAPHIC PRESENTATIONS OF RESPONSES FROM A RANDOMLY SELECTED ADMINISTRATORs.

Item 2. A Plan to Demonstrate How Portable Partitions can be Used to Accommodate Individualized Instruction.
EXHIBIT 18

CHART ILLUSTRATIONS OF RESPONSES
FROM 25 RANDOMLY SELECTED ADMINISTRATORS

<table>
<thead>
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</table>

Item 3. A Plan to Relocate and Reorganize Media Centers
to Expand and/or Facilitate Individualized Instruction
EXHIBIT 19

GRAPHIC ILLUSTRATIONS OF RESPONSES FROM A RANDOMLY SELECTED ADMINISTRATOR.

Response: 30, 25, 20, 15, 10

Value: 75

Item 4. A plan to utilize mobile, multiple-use furniture to facilitate and accommodate individualized instruction.
Item 5. A Plan to Demonstrate How School Corridors can be Altered to Accommodate Individualized Instruction.
EXHIBIT 21
A MODEL FOR REORGANIZING TRADITIONAL SCHOOL PLANTS FOR INDIVIDUALIZED INSTRUCTION
CONSULTANTS' EVALUATION

Thank you for your participation in our study to find ways to modify school plants to accommodate individualized instruction. Please review the attached packet and rate its value for possible use to improve the facility-individualized instruction relationship in the school system in which you work.

<table>
<thead>
<tr>
<th>A Plan for Arranging Traditional Classrooms to Facilitate the Individualization of Instruction</th>
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<td>1 2 3 4 5</td>
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</table>

II. COMMENTS: Write a brief statement concerning the value this packet has for possible use to help improve individualized instruction.
EXHIBIT 22
A SUMMARY OF CONSULTANTS' EVALUATION

I. A Plan for Arranging Traditional Classrooms
to Facilitate the Individualization of Instruction
A Plan to Demonstrate How Portable Partitions
Can be Used to Accommodate Individualized Instruction
A Plan to Relocate and/or Reorganize Media Centers
to Expand and/or Facilitate Individualized Instruction
A Plan to Utilize Mobile Multiple-Use Furniture
to Facilitate and Accommodate Individualized Instruction
A Plan to Demonstrate How School Corridors
Can be Altered to Accommodate Individualized Instruction

II. COMMENTS: Write a brief statement concerning the value this packet has for possible use to help improve individualized instruction.

...a logical approach to inexpensive conversion.
...corridor space should be used for instructional purposes.
...better use of mobile furniture for individualized instruction.
...will significantly improve individualized instruction.
BIBLIOGRAPHY


Bell, J. W., "Individualizing Instruction at the High School Level," The High School Journal, April, 1959, p. 252.

Bonyon, John, Study Carrels: Designs for Independent Study Space, Stanford, California: Western Regional Center of Educational Facilities Laboratories, Stanford University, 1964.


Buehler, Ronald Li., "How to Help Your Teachers Use the New Media," The Nation's Schools, 70 (July, 1962), pp. 41-46.


Dean, Joan, A Place to Paint, New York: Citation Press, 1973, pp. 1-48.


Dean, Joan, Working Space, New York: Citation Press, 1973, pp. 1-47.


Elementary School Buildings... Design for Learning, National Educational Association, 1969.


General Considerations for Facility Evaluation, prepared by Georgia State University, 1974.


Places and Things for Experimental Schools, Education Facilities Laboratory, Incorporated, 1972.


"Profile: Found Space," The National Elementary Principal, Volume 111, September, 1972, p. 27.


School Renewal, Educational Facilities Laboratory, 1971.

Sylvester, Robert, "Four Steps to a Learning Center," Instructor, 76 (June, 1967), pp. 73-84.


The Open Plan School, Educational Facilities Laboratory, 1970.


Ward, M. T., "Teachers are Using MM Centers," The Instructor, 77 (June-July, 1968), p. 120.


Model

DEVELOPING A MODEL FOR REORGANIZING
TRADITIONAL SCHOOL PLANTS FOR
INDIVIDUALIZED INSTRUCTION

by

Edwin R. Casey
J. Wesley Hardy
Sidney B. Horne
John E. Mobley
John P. Nichols
Billie F. Smith
James D. Turpin
Mildred L. Walton

Submitted in partial fulfillment of the requirements for
the degree of Doctor of Education, Nova University

Atlanta Cluster
Dr. R. E. Flanders

Maxi I Practicum
June 16, 1975
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Learning Packets</th>
<th>Page</th>
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<tbody>
<tr>
<td>A Plan for Arranging Traditional Classrooms to Facilitate the Individualization of Instruction</td>
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INTRODUCTION

The goal of American education is to train young people to fulfill their own needs and those of society. For years, psychologists and teachers have talked about the needs and differences among children, and curriculum planners have written thousands of articles and books about individualizing instruction. Through it all, administrators and architects have professed their commitment to a child-centered school. In reality, however, their thoughtful and well-meaning intentions got sidetracked and school buildings continued to be constructed in terms of groups of children centered in one traditional classroom with one teacher.

Recently, attempts have been made to improve upon tradition. School districts have increasingly focused their attention on the learner. As a result, new approaches have developed which stress open space, continuous staff utilization, and independent study. These approaches hold great potential for the improvement of education in America. However, they are held back by one important barrier — the traditional school plant. In order to overcome this barrier, school districts and school administrators must construct or remodel buildings that meet the changing needs of the learner and society.

This model contains five learning packets for reorganizing traditional school plants to accommodate and support individualized instruction.
Each packet is designed to lead the user through a series of steps toward modification of a specific area of a building. It is feasible, however, to adapt any one of the packets to other areas or to use combinations of packets.

Packets developed are:

1. A Plan to Reorganize a Traditional Classroom to Enhance Individualized Instruction Within the Classroom.
2. A Plan to Demonstrate How Portable Partitions can be Used to Accommodate Individualized Instruction.
3. A Plan to Relocate and/or Reorganize Media Centers to Expand and/or Facilitate Individualized Instruction.
4. A Plan to Utilize Mobile, Multiple-Use Furniture to Facilitate and Accommodate Individualized Instruction.
5. A Plan to Demonstrate How School Corridors can be Altered to Accommodate Individualized Instruction.
ABSTRACT

The purpose of this practicum was to develop and field-test a model for reorganizing traditional school plants to accommodate and support individualized instruction. The model was implemented in five areas of traditional buildings in the metropolitan Atlanta area. Results demonstrated that reorganization could be accomplished at considerable savings over new construction. The practicum results suggest that the model may be useful to administrators for evaluation of similar school situations.
LEARNING PACKETS

by

Edwin R. Casey
J. Wesley Hardy
Sidney B. Horne
John E. Mobley
John P. Nichols
Billie F. Smith
James D. Turpin
Mildred L. Walton
A PLAN FOR ARRANGING TRADITIONAL CLASSROOMS TO FACILITATE THE INDIVIDUALIZATION OF INSTRUCTION
A PLAN TO REORGANIZE A TRADITIONAL CLASSROOM TO ENHANCE INDIVIDUALIZED INSTRUCTION WITHIN THE CLASSROOM

by

Sidney B. Horne

and

Mildred L. Walton
PURPOSE:
The purpose of this packet is to improve school administrator's skill in:

1. Assessing the degree to which classrooms facilitate the individualization of instruction process.
2. Arranging traditional classrooms to reinforce the individualization of instruction process.

CONCEPT:

Educational space can be cued with objects and behaviors to embody new meanings that have significance for the individualized learning process.

Sub-Concept:

It is possible to arrange the learning facilities to reinforce the individualized curriculum, and for the individualized curriculum to grow from the facilities.

OBJECTIVES:

Given the information in this packet, administrators will be able to:

1. Perform a pre-assessment of adequacy for existing classrooms in five areas.
2. Use the suggested strategies to arrange a classroom to facilitate the individualized process.
ACTIVITY 1 (OBJECTIVE 1)

PRE-ASSESSMENT

Complete the following pre-assessment of the classrooms in the school you administer. This should be completed without reference to outside resources.

1. List three ways the classroom furniture supports the learning objectives.
   a. 
   b. 
   c. 

2. List three ways the spatial arrangement may be revised to allow more flexibility.
   a. 
   b. 
   c. 

3. List three functions that are accommodated by the learning centers.
   a. 
   b. 
   c. 

4. List three storage areas for teacher and student-made materials.
   a. 
   b. 
   c.
5. Name five pieces of equipment in the classroom. List two ways each piece may enhance individualized instruction.

<table>
<thead>
<tr>
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<td>a.</td>
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</table>

6. Current Status

On the scale below, indicate with a checkmark the present status of the classroom as it accommodates and supports individualized instruction.

[Scale with options: Much Improvement Needed, Little Improvement Needed or no Improvement Needed]

7. Notes and comments
ACTIVITY 2 (OBJECTIVE 2)

Study the following strategies for improving classroom space:

1. Provide a variety of portable, lightweight, and sturdy furniture - tables, chairs, desks, bookcases, and cabinets on casters.

2. Arrange tables, chairs, and desks in a flexible manner that:
   a. correlates with activities.
   b. permits face-to-face interaction.
   c. defines access routes.

3. Remove the teacher's desk from the front or rear of the room to an adjacent space that does not suggest a place of surveillance by a guard.

4. Place small chalkboards and tackboards near carrels and work stations for student use.

5. Disperse the media center into mini-resource centers within classrooms.
   a. Maintain a central media resource center.
   b. Invest in duplicate copies of books, records, games, newspapers, and audio-visual equipment.

6. Construct learning centers in different sizes and shapes from cardboard, plywood, or any sturdy material.

7. Display centers on a table, bulletin board, wall, floor, or suspend them from the ceiling.
8. Use portable units to partition into interest areas.

9. Provide space for a variety of media – projector, tape recorder, television, radio, camera, teletype terminal, computer terminal, duplicating machine, and picture telephone.

10. Mount raceways on the ceiling, floor, or walls if additional conduits are needed to accommodate cables and conductors.

11. Provide storage space for contracts, student folders, learning kits, and other materials.
Classroom Furniture

Stacking Chairs

Movable Chair Desks

Chair Desks

Multi-Drawer Cabinets

Oak Utility Tables

Teacher's Arm Chair

Multi-Purpose Tables and Chairs

Adjustable Tables

Grouping Adaptability
ACTIVITY 3 (OBJECTIVE 2)
FURNITURE AND EQUIPMENT INVENTORY

The logical first step to determining classroom adequacy is to inventory all furniture and equipment. From this inventory, the administrator will be able to assess the degree to which the facilities support the objectives of the individualized process. Moreover, he will be in a better posture to defend requests for additional equipment.

EXPLANATION OF COLUMN NUMBERED ITEMS

Column (1) - Stock Number: Fill in stock number, if available, from equipment catalog, or other source.

Column (2) - Department: For example, English, Social Studies, etc. Elementary schools may substitute grades.

Column (3) - Description: Use the equipment catalog, order, invoices, requisitions to give information.

Column (4) - Serial Numbers: Give vital identification information for all serialized equipment.

Column (5) - Room Number: Enter room number here.

Column (6) - Quantity: Enter correct quantity under correct room number.

Column (7) - Total Quantity: Total all quantities listed.

Column (8) - Unit Cost: Check equipment catalog.

Column (9) - Total Cost: Multiply Column (7), Total Quantity, by Column (8), Unit Cost, and enter correct Total Cost.
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**Total Cost:**

1.20 + 37.37 + 40.38 + 18.15 + 17.65 + 14.75 + 53.02 = 182.17

**Total Quantities:**

2 + 1 + 1 + 1 + 1 + 1 + 1 = 7
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<td>FILE CABINET, 2-Dr., Letter w/lock</td>
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<td>FILE CABINET, 2-Dr., Letter w/lock</td>
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<td>38.50</td>
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<td>CABINET, Steel, Storage, 36&quot; w x 18&quot; d x 78&quot; h Shelves, Dbl. Door w/lock</td>
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<td>39.69</td>
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<td>TABLE, Round, Study, Metal Legs, 48&quot;</td>
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<td>DESK, Table, Typing</td>
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<td>TABLE, Television, Approx. 30&quot; x 30&quot; x 30&quot;</td>
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<td>FLANNEL BOARD, Peg, 28&quot; x 46&quot;</td>
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<td></td>
<td></td>
<td>CHALKBOARD, Portable 3' x 6'</td>
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<td></td>
<td></td>
<td>BULLETIN BOARD, Portable 3' x 6'</td>
<td></td>
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<td>HATRACK, Portable, 6&quot; w/ 4 Hooks</td>
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<td>BOOKCASE, 32&quot; w x 24&quot; h, Natural Wood</td>
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<td></td>
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</table>
## FURNITURE AND EQUIPMENT INVENTORY

<table>
<thead>
<tr>
<th>Stock No.</th>
<th>(2) Description</th>
<th>(4) Dept.</th>
<th>(3) Serial No.</th>
<th>(5) Rm. No.</th>
<th>Rm. No.</th>
<th>Rm. No.</th>
<th>Rm. No.</th>
<th>Rm. No.</th>
<th>Total Quan.</th>
<th>Unit Cost</th>
<th>Total Cost</th>
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<tbody>
<tr>
<td></td>
<td>Classroom Furniture</td>
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</table>
# ACTIVITY 4 (OBJECTIVE 3)
## POST-ASSESSMENT OF CLASSROOM ADEQUACY
(Use one sheet for each classroom)

<table>
<thead>
<tr>
<th>A. FURNITURE</th>
<th>SATISFACTORY</th>
<th>NEEDS IMPROVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Movable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Well-constructed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Variety of types</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Assorted sizes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Desks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Chairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Tables</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Bookcases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Carrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Dividers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B. Spatial Arrangement</th>
<th>SATISFACTORY</th>
<th>NEEDS IMPROVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Lends flexibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Supports activities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Encourages interaction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Defines access routes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Provides adjacent placement of teacher's desk</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C. Centers</th>
<th>SATISFACTORY</th>
<th>NEEDS IMPROVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Well-constructed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Functional</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Attractive</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
D. Storage Cabinets
   1. Instructional media
   2. Student folders
   3. Work samples

E. Structural Miscellany
   1. Lighting
   2. Climate control
   3. Electrical outlets
   4. Acoustical treatment
   5. Bulletin boards
   6. Chalkboards
ACTIVITY 5 (OBJECTIVE 3)

1. List ways you have used the results of your Classroom Adequacy Assessment to improve the individualization process.
   a. 
   b. 
   c. 
   d. 
   e. 

2. On the scale below, mark with a checkmark where your program was before you began this learning experience and an X where you judge it to be presently.

<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
Exhibit A

Reading and Writing

Tables and Chairs or Desks

Storage

Table and Chairs or Desks

Storage

Interest Center

Science

Bookcase

Social Science

Bookcase

Math

Media Center

or

Class Library

Suggested Learning Environment
EXHIBIT B

RESOURCES

HUMAN RESOURCES
1. The resource staff of the local school system
2. The resource staff of the State Department of Education
3. Staff of schools implementing the process
4. Consultants from colleges and universities

MATERIAL RESOURCES

Bell, J. W., "Individualizing Instruction at the High School Level," The High School Journal, April, 1959, p. 252.


"Profile: Found Space," p. 27.
MOVABLE PARTITIONS

Modify Learning Areas               Support Individualized Instruction

Control                              Provide

Traffic     Space
Vision      Sound

Shelving    Teaching Walls
Cabinetry   Work Surfaces
Fire Safety

13.1           Fixture Outlets
A PLAN TO DEMONSTRATE HOW PORTABLE PARTITIONS CAN BE USED TO ACCOMMODATE INDIVIDUALIZED INSTRUCTION

by

Edwin R. Casey

and

John E. Mobley
PURPOSE:

The purpose of this packet is to improve the administrator's skill in:

1. Assessing to what extent movable partitions are presently used.
2. Assessing the present school plant to determine if movable partitions can be implemented.
3. Planning for the construction, purchase, and installation of movable partitions.

CONCEPT:

Individualized instruction can be complemented if maximum use of existing floor space is utilized.

Sub-Concept:

A school administrator should know how to locate and use movable partitions.

OBJECTIVES:

Given the necessary information, a school administrator will be able to:

1. Use the instrument provided to assess present conditions and determine how and where movable partitions can be used.
2. Demonstrate three ways movable partitions can be used to enhance individualized instruction.
3. List resource materials, outlets, and commercial supplies from exhibits -- movable partitions through the use of packet.
   a. drawings and illustrations
   b. list of mobile partition suppliers
   c. list of other free and inexpensive sources
   d. list of possible consultant service agencies
   e. mobile partition survey results

4. Use this packet to accommodate and support individualized instruction.
PRE-ASSESSMENT OF MOVABLE FURNITURE

(Do not consult any resources in completing this pre-assessment.)

1. List five kinds of movable partitions in your building.
   a. 
   b. 
   c. 
   d. 
   e.

2. List three possible uses of movable partitions rather than uses identified above.
   a. 
   b. 
   c. 

3. List three ways to obtain movable partitions to accommodate and support individualized instruction.
   a. 
   b. 
   c. 

4. On the scale below indicate with a checkmark the present status of movable partitions that accommodate and support individualized instruction.

   [ ] Much Improvement Needed
   [ ] Little or no Improvement Needed
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use separate sheet for each kind of movable partition identified.)

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Size</th>
<th>Location</th>
<th>Present Use of Unit</th>
<th>Are the units being used to accommodate and support individualized instruction? If so, how?</th>
<th>Notes and comments</th>
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</thead>
<tbody>
<tr>
<td>Bookcases</td>
<td></td>
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<td></td>
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<tr>
<td>Movable Chalkboards</td>
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<tr>
<td>Storage Cabinets</td>
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<tr>
<td>Bulletin Boards</td>
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<tr>
<td>Study Carrels</td>
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<tr>
<td>Screens</td>
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<td>Desks</td>
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<tr>
<td>Tack Boards</td>
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<tr>
<td>Other</td>
<td></td>
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</tbody>
</table>

1. Number on hand
2. Size
3. Location
4. Present use of unit
5. Are the units being used to accommodate and support individualized instruction? If so, how?
6. Notes and comments
ACTIVITY 2 (OBJECTIVE 2)

1. Indicate the manner in which your school could use movable partitions in the modification of learning areas.
   (See Figures 1, 2, 3, 4, 5, 6)

1. Large Group Activities
   a. ___ Regulate distance between groups
   b. ___ Accommodate traffic flow
   c. ___ Provide additional space for multi-class uses
   d. ___ Control visual contact
   e. ___ Expand visual contact
   f. ___ Regulate noise level

2. Small Group Activities (single classroom)
   a. ___ Regulate distance between groups
   b. ___ Provide privacy
   c. ___ Regulate noise level
   d. ___ Control visual contact

3. Individual Activities
   a. ___ Audio-visual applications
   b. ___ Personal counseling
   c. ___ Privacy
   d. ___ Independent Study
   e. ___ Reduce visual contact
II. Display and Informational Purposes
   1. Walls used for bulletin boards, chalkboards, and projection
      screens
   2. Used to hang shelves and cabinets

III. Absorb Noise
   1. Reduce noise between classrooms
   2. Reduce noise between classroom and traffic flow
   3. Reduce noise between individuals in classroom activities
   4. Seal off electronic audio noise

IV. Utilize Large Open Space
   1. Gymnasium
   2. Auditorium
   3. Stage
   4. Corridors
   5. Cafeteria
   6. Library
   7. Laboratories

Now that you have identified ways to use movable partitions, place a
checkmark at the left of those items suitable to your needs.
ACTIVITY 3 (OBJECTIVE 3)

Ways to obtain movable partitions:

1. Purchase commercially (Exhibit F)
2. Free and inexpensive sources (Exhibit G)
3. Local industrial art and maintenance department (Exhibit H)
4. Consultant services (Exhibit I)
5. Use of available materials and equipment (Exhibit J)

Comments:

Refer to Printed Resources (Exhibit K) for additional information.
POST-ASSESSMENT

ACTIVITY 4 (OBJECTIVE 4)

Use the information contained in this packet or from any outside source in completing your assessment.

1. Having completed your pre-assessment, identify the four most practical partitions in the school you administer that could be put on rollers and made movable.
   a. 
   b. 
   c. 
   d. 

2. List five ways that movable partitions can be used in the school you administer to accommodate individualized instruction. (Activity 2).
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

...
3. What sources could you, or have you, used in your efforts to implement movable partitions?
   a. Commercial supplies
   b. Free and inexpensive sources
   c. Local industrial art or maintenance department
   d. Consultant services
   e. Available materials and equipment

4. On the scale below indicate with a checkmark the present status of movable partitions that accommodate and support individualized instruction.
   
   /  

   Much Improvement Needed   Little or no Improvement Needed

Comments:
EXHIBIT A

An arrangement of four conventional classrooms has been created using portable partitions. These sliding panels are suspended from the ceiling and sealed at their base allowing for maximum acoustical advantages.
Flexible partitions easily create a transitional situation, which still retains a conventional classroom or audio/visual area, and a smaller area for seminars, conferences, or teacher preparation.
A quick rearrangement into a plan of open class areas, for common subjects such as U. S. History and American Literature grouped around a resource center. This area is now a useful open plan arrangement which has been derived from the original four conventional classrooms as shown in Exhibit A.
EXHIBIT D

A resource center created from the same grid as shown in Exhibit A, surrounded by learning corners.
A backdrop arrangement creating a class-size stage area and wings. The ease of panel relocation allows daily, even hourly rearrangement to suit the instructional space to the educational program. Note, also a teacher preparation area defined just outside the class area.
EXHIBIT F

SOURCES FOR MOVABLE EQUIPMENT
AND SUPPLIES

Peabody North
Manchester, Indiana 46962

Virginia Metal Products
Orange, Virginia 22960

Modernfield
Box 310
New Castle, Indiana 47362

Wenger Corporation
1073-5 Wenger Building
Awatonna, Minnesota 55060

Walker Systems, Inc.
520 South 21st Avenue East
Duluth, Minnesota 55812

Donn Products, Inc.
700 Bassett Rd.
Westlake, Ohio 44145

American Seating Company
Grand Rapids, Michigan 49504

The Macton Corporation
On-the-Airport
Danbury, Connecticut 06810

Brewster Corporation
Old Laybrooks, Connecticut 06475
EXHIBITED
FREE AND INEXPENSIVE SOURCES OF MATERIALS

State Agencies for Surplus Property

Military Surplus Outlets

Salvage Businesses

Retail Businesses (e.g., grocery stores that discard usable containers, cardboard, etc.)

Utility Companies (cable reels, etc.)

Local Industries (sawmills, lumber yards, etc.)

School Patrons
EXHIBIT H

LOCAL INDUSTRIAL ART AND MAINTENANCE DEPARTMENT

Industrial art class projects to build partitions
Subject matter class to build partitions
Teacher to build partitions
Individual students to build partitions
Maintenance department to build partitions according to:

1. Individual and class needs
2. School plant architecture
3. Floor space
EXHIBIT I

CONSULTANT SERVICES
Maintenance Department
State Education Department
Architects
Construction Companies
Open Space Schools
Other Educators
Colleges and Universities
American School and University
Education Facilities Laboratory
U. S. Office of Education
SEF Forum
### EXHIBIT J

**AVAILABLE MATERIALS AND SUPPLIES**

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<thead>
<tr>
<th>Material</th>
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<tr>
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<td>Storage Cabinets</td>
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<tr>
<td>Study Carrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable Walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalkboards</td>
<td></td>
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<tr>
<td>Bulletin Boards</td>
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<td>Screens</td>
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<td>Crates and Boxes</td>
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<tr>
<td>Tack Boards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EXHIBIT K
PRINTED RESOURCES


Elementary School Buildings...Design for Learning, National Education Associations, 1969.

General Considerations for Facility Evaluation, prepared by Georgia State University, 1974.


Places and Things for Experimental Schools, Education Facilities Laboratory, Incorporated, 1972.


School Renewal, Educational Facilities Laboratory, 1971.

The Open Plan School, Education Facilities Laboratory, 1970.


A PLAN TO RELOCATE AND/OR REORGANIZE MEDIA CENTERS TO EXPAND AND/OR FACILITATE INDIVIDUALIZED INSTRUCTION

by

J. Wesley Hardy

and

Billie F. Smith
PURPOSE:
The purpose of this learning packet is to improve individualized instruction by making media center information available to the school administrator. In order to fully achieve this purpose it is deemed necessary to:

1. Assess the environment, space, equipment, and functions of a school media center.
2. Plan for the acquisition of additional equipment and flexibility in the use of present media center facilities.

CONCEPT:
The school media center is a flexible work center designed to enhance the teaching-learning process.

Sub-Concept:
Establishing the status of the existing media center environment, space, equipment, and functions will allow the school administrator to plan for expanded uses of the media center, with greater flexibility.

OBJECTIVES:
Given the necessary information the school administrator will be able to:

1. Use the instrument provided for assessing the media center environment, space, equipment, functions, and future needs.
2. Analyze learning media center spaces in terms of functions.

3. Demonstrate three ways to rearrange media center space to follow flexibility.

4. Demonstrate ability to improve flexibility and use of media facilities through use of the packet.
   a. media center survey results
   b. drawings and illustrations
   c. list of possible consultants
   d. list of sources for equipment and media center supplies

5. Use the packet to accommodate and support individualized instruction.
PRE-ASSESSMENT OF MEDIA CENTER

Complete the following pre-assessment of the present media center situation in the school that you administer. This is to be completed without reference to outside resources.

1. List three ways the environment of the media center encourages desired learning. (Objective 1)
   a.
   b.
   c.

2. List three possible functions of the media center. (Objective 1)
   a.
   b.
   c.

3. List three possible ways the media center space can be rearranged to allow flexibility. (Objectives 1 and 2)
   a.
   b.
   c.

4. List five ways a media center facility can be improved to accommodate and support individual instruction. (Objectives 4 and 5)
   a.
   b.
   c.
   d.
   e.
5. Name five pieces of equipment in the media center of the school. List two ways the use of each of these pieces of equipment may enhance individualized instruction. (Objectives 1 and 5)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Uses of Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>a1.</td>
</tr>
<tr>
<td>b.</td>
<td>b1.</td>
</tr>
<tr>
<td>c.</td>
<td>c1.</td>
</tr>
<tr>
<td>d.</td>
<td>d1.</td>
</tr>
<tr>
<td>e.</td>
<td>e1.</td>
</tr>
</tbody>
</table>

6. Current Status

On the scale below indicate with a checkmark the present status of the school's media center as it accommodates and supports individualized instruction.

Much Improvement Needed

Little or no Improvement Needed
NEEDS ASSESSMENT

ACTIVITY 1. (OBJECTIVES 1 and 2)

Assessment of Environment:

<table>
<thead>
<tr>
<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Functional in design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Inviting in appearance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Good lighting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Acoustical treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Climate control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Floor covering reduces noise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Adequate wiring available</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Furniture (sized) for students is appropriate

Assessment of Space:

<table>
<thead>
<tr>
<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Located away from noise areas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Easily accessible to students and teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Permits extended day use without opening entire school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Has 800 (elementary) or 1000 (high school) square feet in the library reading room</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

162
5. Has 240 square feet in a workroom

6. Adequate shelving for required number of books

7. Reading area
   Elementary 500 students -
   1875 square feet
   900 students -
   2875 square feet
   High school 1000 students -
   3125 square feet
   1500 students -
   4375 square feet
   2000 students -
   5625 square feet

8. Office space - 150 square feet per librarian

9. Conference room - 150 square feet

10. One conference room for each 500 students

11. Periodical resources storage area
    (elementary) not less than 300 square feet -
    (high school) not less than 1000 square feet

<table>
<thead>
<tr>
<th>Satisfactory</th>
<th>Needs Improvement</th>
<th>Unsatisfactory</th>
</tr>
</thead>
</table>
12. Individual study stations enough for 30 to 40% of seating capacity

13. Individual study stations are electronically equipped for viewing and listening

14. Housing provided for audio visual material (minimum 120 square feet) over and beyond regular storage space and magazine storage

15. Media production laboratory (800 to 1000 square feet with sinks, running water, and electrical outlet)

Assessment of Equipment:
Identify the number on hand of the following items of equipment, usually available in a well-stocked media center.

<table>
<thead>
<tr>
<th>Item</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 mm sound projector</td>
<td>1 per 4 teaching stations plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 mm projector</td>
<td>1 per teaching station plus 15 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>2 x 2 slide projector</td>
<td>1 per 5 teaching stations plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>remotely controlled</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filmstrip or filmstrip-slide projector</td>
<td>1 per 10 teaching stations plus 1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound filmstrip projector</td>
<td>1 per 10 teaching stations plus 1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 x 10 overhead projector</td>
<td>1 per teaching station plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opaque projector</td>
<td>1 per 25 teaching stations plus 1 per floor in multi-floor buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filmstrip viewer</td>
<td>1 per teaching station plus the equivalent of 1 per 2 teaching stations in media center in elementary schools and 1 per 3 teaching stations in media center in secondary schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>----------------------------</td>
<td>---------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>2 x 2 slide viewer</td>
<td>1 per 5 teaching stations plus 1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TV receiver</td>
<td>1 per teaching station and 1 per media center where programs are available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Microprojector</td>
<td>1 per 20 teaching stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record player</td>
<td>1 per teaching station, K-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per grade level, 4-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per 15 teaching stations in junior high and secondary schools</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 set of earphones for each player</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio tape recorder</td>
<td>1 per 2 teaching stations in elementary schools plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per 10 teaching stations in junior high and secondary schools plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 set of earphones for each recorder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-----------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Listening station</td>
<td>A portable listening station with 6 - 10 sets of earphones at the ratio of 1 per 3 teaching stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projection cart</td>
<td>1 per portable piece of equipment, purchased at the time equipment is obtained</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Projection screen</td>
<td>1 permanently mounted screen per classroom plus additional screens of suitable size as needed for individual and small group use. The permanent screen should be no smaller than 70 x 70 with keystone eliminator.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Closed circuit television</td>
<td>All new construction should include provisions for installation at each teaching station and media center. Older buildings should be wired for closed-circuit television with initiation of such programs.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Radio receiver (AM-FM)</td>
<td>1 per media center plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>central distribution system (AM-FM)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Copying machine</td>
<td>1 per 30 teaching stations plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duplicating machine</td>
<td>1 per 30 teaching stations plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro-reader (some with microfiche</td>
<td>Equivalent of 1 per 10 teaching stations to be located in the media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attachment)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Micro-reader printer</td>
<td>1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable video tape recorder system</td>
<td>1 per 15 teaching stations with a minimum of 2 recorders per building</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(including cameras)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local production equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assessment of Functions:

Interchangeable functions:

1. Small spaces can be converted from seminar to individual study area.
2. Media center is designed to be flexible.

Specific functions:

1. The media center is used by all school subject area personnel.
2. The media available supports all subject area personnel.
3. Scheduling in the media center provides flexibility for use.

Individual student use:

1. Center is open all day for students.
2. Study carrels are available for any student.
3. Audio-visual equipment is accessible to student.
4. There is flexibility in checking out equipment and material to student.

<table>
<thead>
<tr>
<th>Needs</th>
<th>Satisfactory</th>
<th>Improvement</th>
<th>Unsatisfactory</th>
</tr>
</thead>
</table>
Training Activity:

1. Using the information identified in the assessment of environment, space, equipment, and functions, list the improvements needed.

2. Using the list of improvements needed, establish priorities by ranking each item.
ACTIVITY 2 (OBJECTIVE 3)

A. Ways to Arrange Space to Allow Flexibility

1. Flexibility can be accomplished by movable panels, space dividers on rollers, folding and accordion partitions. The teachers and students should be able to easily operate whatever devices are used. The whole process of making the change should not take more than two minutes (see Figure 1).

2. Flexibility can be accomplished by relocating heavy furniture and rearranging other contents of the spaces involved. The same criteria used in number 1 apply, but there will be more time needed for moving.

3. Flexibility can be accomplished by providing new spaces by the use of demountable partitions (see Figure 2).

4. Flexibility can be accomplished by knocking down block partitions, rewiring, and utilizing more effectively the existing facilities (see Figure 3).

B. Training Activity

1. Draw a floor plan model of your present media center.

2. Illustrate two ways you can rearrange the present media center space to allow flexibility.
ARRANGING SPACE TO ALLOW FLEXIBILITY

FIGURE 1

FIGURE 2

FIGURE 3
ACTIVITY 3 (OBJECTIVE 4)

A. Ways to Improve the Flexibility and Use of the Media Center Facilities

1. Better utilization of present media center. (refer to Media Center Survey Results)

2. Review drawings and illustrations to see how possible changes may be made to improve present media center. (see Exhibits A, B, C, D, E, F, and G)

3. Confer with specialists in the media center field of study in order to have the expertise available to assist in the role of consultants. (see Consultant Service Agencies List, Exhibit H)

4. Acquire additional equipment to have available in the media center. Use the list of Sources for Equipment and Media Center Supplies. (see Exhibit I)

5. Review printed materials in the media center field to obtain additional information. Use the list of Printed Resources. (see Exhibit J)

B. Training Activity

1. Identify ways the flexibility and use of the media center facilities have improved by the use of the four methods listed above.

2.

3.

4.
POST-ASSESSMENT OF MEDIA CENTER

(OBJECTIVE 5)

Complete the post-assessment by utilizing information contained in the packet or from other available sources.

1. List ways you have used the results of the media center survey (Activity 1).
   a. 
   b. 
   c. 
   d. 
   e. 
   f. 

2. List ways you have used in rearranging for space and to allow flexibility for individualized instruction (Activity 2).
   a. 
   b. 
   c. 

3. List ways that you have used to improve the use of the media center facilities to enhance individualized instruction (Activity 3).
   a. 
   b. 
   c. 
4. Check the media center sources that you have actually used.
   - media center survey results
   - drawings and illustrations
   - list of possible consultants
   - sources of equipment and media center supplies

5. Status After Use of Packet

   On the scale below indicate with a checkmark where you judge the media center program to be at the school you administer following this learning experience.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much Improvement Needed</td>
<td>Little or no Improvement Needed</td>
<td></td>
</tr>
</tbody>
</table>
This instructional materials center has facilities for large group instruction and independent study.
EXHIBIT B
Renovated Classrooms
Storage Project Area
Small Group Area

Independent Study
Movable Divider
Projection Unit

EXHIBIT C
Media Center features spaces for storytelling, listening, viewing, studying, and reading.
Proposed Changes for Media Center from Existing Classrooms

- New Conference
- New Storage
- New Walls and Doors
- Controlled Exit
- New Office
- New Workroom
- New 6' View Window

Existing Walls to be removed

Existing Exit

66'

96"
Media Center converted from classrooms provides separate areas for storytelling, class and study, reference, listening, and viewing. Note the small study carrels to the far right of the room.
EXHIBIT H
CONSULTANT SERVICE AGENCIES

1. Representatives of Media Center Supply and Equipment Companies
2. State Department of Education Planning Consultants
3. Local School System Planning Consultants
4. Architects - Governmental and Private
5. Cooperative Educational Service Agency Consultants of Georgia
6. State Department of Education, Division of Educational Media Services
7. Local School System Department of Educational Media
8. Selected Local Educators
9. Department of Audio-Visual Instruction National Education Association

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EXHIBIT I.

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

1. American Library Association
   50 East Huron Street
   Chicago, Illinois 60611

   P.O. Box 388
   Northington, Ohio 40385

3. Avis
   3796 North Decatur Road
   Decatur, Georgia 30033

4. Advanced Business Products
   214 Forsyth Street
   Atlanta, Georgia 30083

5. Baker and Taylor Educational Products
   1391 Chattahoochee Avenue, N.W.
   Atlanta, Georgia 30318

6. Calhoun Company, Inc.
   121 Forrest Avenue, N.E.
   Atlanta, Georgia 30303

7. Cartridge Control Corporation
   2091 Faulkner Road, N.E.
   Atlanta, Georgia 30324

8. Children's Press
   Route 7, Box 460
   Griffin, Georgia 30223

9. Cramer Video
   120 Hampton Avenue
   Needham, Massachusetts 02194

10. Creative Publications
    P.O. Box 10328
    Palo Alto, California 94303

11. Follett Publishing Company
    1010 W. Washington Boulevard
    Chicago, Illinois 60607

12. Frye's Foto Shop
    220 Luckie Street, N.W.
    Atlanta, Georgia 30303
EXHIBIT I (continued)

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

13. Josten's Monarch Book Company
   4070 Shirley Drive
   Atlanta, Georgia 30336

14. Learning Resources Company
    202 Lake Miriam Drive
    Lakeland, Florida 33803

15. MacMillan School Supplies
    415 Buford Highway, N.E.
    Atlanta, Georgia 30345

    1586 Stoneridge Drive
    Stone Mountain, Georgia 30083

17. McCormack-Mathers Publishing Company
    300 Pike Street
    Cincinnati, Ohio 45202

18. Mead School Products
    1391 Chattahoochee Avenue, N.W.
    Atlanta, Georgia 30318

19. Nisewonger's A. V. Center
    1821 Sherwood Drive
    Norcross, Georgia 30071

20. Rand McNally and Company
    P. O. Box 7600
    Chicago, Illinois 60680

21. R C A Service Company
    1901 Mountain Industrial Boulevard
    Tucker, Georgia 30084

22. Rico Industries
    P. O. Box 122
    Calhoun, Georgia 30701

23. School Equipment Dist., Inc.
    319 Monroe Street
    Montgomery, Alabama 36104

24. Scott Foresman Company
    1955 Montreal Road
    Tucker, Georgia 30084
EXHIBIT I (continued)

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

25. Southwest Business Publications Company
    12633 Memorial Drive, Suite 33
    Houston, Texas 77024

26. Science Research Associates
    259 East Erie Street
    Chicago, Illinois 61611

27. The Stevens Company, Inc.
    1021 Columbia Avenue, N.E.
    Atlanta, Georgia 30309

28. Thomas Education Systems
    5369 Saffron Drive
    Atlanta, Georgia 30338

29. Thompson School Book Company of Georgia
    1580 Stoneridge Drive
    Stone Mountain, Georgia 30083

30. Transilwrap Company of Atlanta
    3616 McCall Place
    Doraville, Georgia 30340

31. Visual Systems Company
    3870 North Peachtree Road
    Atlanta, Georgia 30341

32. Walt Disney Educational Media
    Dept. AB-127, 800 Sonora Avenue
    Glendale, California 90201

33. Westbrook Ind. Electronics
    120 Lakeview Drive
    Birmingham, Alabama 35209

34. Wil-Kin, Incorporated
    800 Lambert Drive, N.E.
    Atlanta, Georgia 30324
EXHIBIT J
PRINTED RESOURCES

Books and Pamphlets:


Articles:


"Are Study Carrels Practical in Elementary Schools," School Management, 7 (June, 1963), 55 - 57.


Buehler, Ronald G., "How to Help Your Teachers Use the New Media," The Nation's Schools, 70 (July, 1962), 41 - 46.


EXHIBIT J  (continued)

PRINTED RESOURCES


Sylwester, Robert, "Four Steps to a Learning Center," Instructor, 76 (June, 1967), 73 - 84.


Ward, M. T., "Teachers Are Using MM Cente," The Instructor, 77 (June - July, 1968), 120.
PRINTED RESOURCES


MOBILE FURNITURE

Modify Learning Areas
Bookcases
Listening Stations

Support Individualized Instruction
Dividers
Cabinets
A PLAN TO UTILIZE MOBILE, MULTIPLE-USE FURNITURE TO FACILITATE AND ACCOMMODATE INDIVIDUALIZED INSTRUCTION

by

John P. Nichols

and

James D. Turpin
PURPOSE:

The purpose of this packet is to improve school administrator skills in:

1. Assessing the quantity of mobile furniture in their building.
2. Assessing the present use of mobile furniture in their building.

CONCEPT:

School furniture is mobile and has multiple uses.

Sub-Concept:

Identification of mobile school furniture, present uses, and planning for better uses is a basic concern of school administrators.

LEARNING OBJECTIVES:

Given the necessary information, school administrators will be able to:

1. Use the instrument provided for assessing mobile furniture quantity, use, and future needs.
2. Demonstrate three different ways to use mobile furniture in the modification of learning areas.
3. Demonstrate ability to improve the quantity and use of mobile furniture through the use of packet:
   a. drawings and illustrations
   b. lists of mobile furniture suppliers
   c. lists of other free and inexpensive sources
   d. lists of possible consultant service agencies
   e. mobile furniture survey results

4. Accommodate and support individualized instruction by demonstrating his ability to use the packet.
PRE-ASSESSMENT OF MOBILE FURNITURE

(Do not consult any resources in completing this pre-assessment.)

1. List five different kinds of mobile furniture in your building and present use of each. (Objective 1)
   a. 
   b. 
   c. 
   d. 
   e. 

2. List three different possible uses of mobile furniture other than uses identified above. These uses must be applicable in the modification of learning areas. (Objective 2)
   a. 
   b. 
   c. 

3. List three ways to obtain mobile furniture needed to accommodate and support individualized instruction. (Objectives 3 and 4)
   a. 
   b. 
   c. 

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4. Place a checkmark on the scale of the present status of mobile furniture in the school you administer.

Much Improvement Needed

Little or no Improvement Needed
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Listening Stations
- Room Dividers
- Storage Cabinets
- Multi-Purpose Storage Cabinets
- Other

1. Total number of units on hand

2. Size of units
   - Small
   - Medium
   - Large

3. Location of units
   - Regular classroom
   - Library
   - Special classrooms
   - Teacher work areas
   - Other, list

4. Present use of units

5. Are the units identified being used to accommodate and support individualized instruction? If so, how?
6. Notes and comments
ACTIVITY 2 (OBJECTIVE 2)

WAYS TO USE MOBILE FURNITURE IN THE MODIFICATION OF LEARNING AREAS

I. Mobile furniture can be used for dividing or sectioning the classroom.
   A. Sectioning Provides
      1. Individual student work areas
      2. Small group work areas
      3. Quiet thinking areas
      4. Balance between quiet and noisy work areas
      5. Active learning atmosphere
   B. Training Activity
      1. Using mobile furniture identified in your Mobile Furniture Survey, draw a floor plan model which reflects the five concepts listed above. (Use a separate sheet of paper.)
      2. List some areas in your building where your floor plan model can be used.

II. Mobile furniture can be used for displaying pertinent materials.
   A. Possible Display Uses
      1. Display student work on backs of the mobile furniture.
      2. Display instructions for using the learning area.
3. Projection screens

4. Three-dimensional display and demonstration space through proper placement of the mobile furniture

B. Training Activity

1. List the mobile furniture identified in your Mobile Furniture Survey under the proper category.

<table>
<thead>
<tr>
<th>Flat Display of Student Work</th>
<th>Use as Projection Screens</th>
<th>Three-Dimensional Display Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>a.</td>
<td>a.</td>
</tr>
<tr>
<td>b.</td>
<td>b.</td>
<td>b.</td>
</tr>
<tr>
<td>c.</td>
<td>c.</td>
<td>c.</td>
</tr>
<tr>
<td>d.</td>
<td>d.</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>e.</td>
<td></td>
</tr>
</tbody>
</table>

III. Mobile furniture can be used for storage of pertinent materials and supplies.

A. Possible Storage Uses

1. Materials storage
2. Supplies storage
3. Equipment storage

B. Training Activity

1. Present mobile furniture can best be used for storage of:

<table>
<thead>
<tr>
<th>Materials</th>
<th>Supplies</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a.</td>
<td>a.</td>
<td>a.</td>
</tr>
<tr>
<td>b.</td>
<td>b.</td>
<td>b.</td>
</tr>
<tr>
<td>c.</td>
<td>c.</td>
<td>c.</td>
</tr>
</tbody>
</table>
2. Now that you have identified units available, place a checkmark by those units you plan to use for storage purposes.
ACTIVITY 3 (OBJECTIVE 3)

WAYS TO OBTAIN MOBILE FURNITURE
NEEDED TO ACCOMMODATE AND SUPPORT
INDIVIDUALIZED INSTRUCTION

1. Have local industrial arts or maintenance departments construct
   (see Exhibits A, B, C, D, E).

2. Purchase commercially (see list of suppliers, Exhibit F).

3. Ask others for assistance (see Consultant Service Agencies lists,
   Exhibit G).

4. Obtain from free and inexpensive sources materials for constructing
   mobile furniture (see list of sources, Exhibit F).

5. Use present furniture (see results of Mobile Furniture Survey).

Comments:

Refer to Printed Resources (Exhibit H) for additional information.
ACTIVITY 4 (OBJECTIVE 4)

POST-ASSESSMENT OF MOBILE FURNITURE

(You may use information contained in the packet or other outside sources in completing the post-assessment.)

1. List ways you have used the results of your Mobile Furniture Survey (Activity 1).
   a. 
   b. 
   c. 
   d. 
   e. 

2. List ways sectioning, displaying, and storage uses of mobile furniture have improved individualized instruction (Activity 2).
   a. 
   b. 
   c. 
   d. 
   e. 

3. Check the mobile furniture sources which you actually used (Activity 3).
   - Units built by local maintenance department
   - Commercial suppliers
   - Consultant agencies
   - Free and inexpensive sources
   - Mobile Furniture Survey Results
4. On the scale below mark with a checkmark the status of the mobile furniture in the school you administer after the use of the learning packet.

[Scale with options: Much Improvement Needed, Little or no Improvement Needed]
EXHIBIT A

Mobile Multi-Utility Cabinet

Lockable Casters

All shelves adjustable
EXHIBIT B
Mobile Divider - Open Space Program

Lockable Casters
Paint: White
EXHIBIT C
Mobile Listening Station
EXHIBIT D
Mobile Multi-Purpose Bookshelf
EXHIBIT E

Mobile Storage and Multi-Purpose Unit
EXHIBIT F

SOURCEs OF SUPPLIES

Free and Inexpensive Supplies
Furniture Stores (discarded cardboard containers)
Hardware Stores (discarded scrap materials)
Cabinet Shops (discarded scrap lumber)
Vocational Schools (free supervised student labor)
Military Surplus Outlets (inexpensive surplus)
Furniture Factory Outlets (damaged inexpensive items)

Catalog Resources
Beckley-Cardy
Brodhead-Garrett
C C M: Standard School, Inc.
Ellman's
MacMillan School Supplies
J. C. Penny Co.
Pyramid Buyer's Guide
Sears, Roebuck and Co.
EXHIBIT G
CONSULTANT AGENCIES

Representatives of furniture supply companies
State Department of Education and local school planning consultants
Architects (governmental and private)
Selected local educators
Cooperative Education Service Agency consultants
EXHIBIT H

PRINTED RESOURCES


Dean, Joan, A Place to Paint, New York: Citation Press, 1973, pp. 1-48.

Dean, Joan, Working Space, New York: Citation Press, 1973, pp. 1-47.


CORRIDORS

Modify Learning Areas   Support Individualized Instruction
A PLAN TO DEMONSTRATE HOW SCHOOL CORRIDORS CAN BE ALTERED TO ACCOMMODATE INDIVIDUALIZED INSTRUCTION

by

Edwin R. Casey
J. Wesley Hardy
Sidney B. Horne
John E. Mobley
John P. Nichols
Billie F. Smith
James D. Turpin
Mildred L. Walton
PURPOSE:

The purpose of this packet is to assist school administrators in:

1. Assessing corridors as learning space.
2. Preparing for the use of corridors as learning space.
3. Planning for appropriate learning activities to take place in corridor space.

CONCEPT:

Corridors make up a large portion of a school plant and with modification are available as learning space.

Sub-Concept:

* Optimum use of all space, including corridors, is a basic concern of school administrators.

OBJECTIVES:

Given the necessary information, school administrators will be able to:

1. Use the instrument provided for assessing corridor space as possible learning space.
2. Demonstrate three different ways to use corridor space as learning space.
3. Demonstrate ability to improve the quality and use of corridor space through use of this packet.

4. Use the packet to accommodate and support individualized instruction. (Post-assessment)
PRE-ASSESSMENT

(Do not consult any outside sources in completing this pre-assessment.)

1. List present use of corridors.
   a. 
   b. 
   c. 
   d. 
   e. 

2. List ways other than the above that corridor space may be used for individualized instruction.
   a. 
   b. 
   c. 
   d. 
   e. 

3. List ways that corridor space may be modified to accommodate and support individualized instruction.
   a. 
   b. 
   c. 
   d. 
   e. 
ACTIVITY 1 (OBJECTIVE 1)

Corridor Survey Instrument:

1. Sketch of building. (Draw a thumbnail sketch of the building below, noting corridor space available for use as learning areas.)

2. Corridor dimensions
   A. Width_____  
   B. Length_____  
   C. Height_____
3. Facilities assessment
   (check one)
   
   A. Lighting
      Adequate  Fair  Poor
   B. Electrical outlets
      Adequate  Fair  Poor
   C. Noise factor
      Adequate  Fair  Poor
   D. Traffic flow
      Heavy  Average  Light
   E. Adjacent space use
      Classroom  Cafeteria
              Restroom  Office  Other

Training Activity:
   Identify areas suitable for individual or small group work, tutorial areas, or display areas.
ACTIVITY 2 (OBJECTIVE 2)

Ways to use corridors as learning space:

1. Corridors can be used for individual or small-group learning activities. Listed below are some suggested ways to use corridor space as learning areas. Place a checkmark at the left of those suitable for activities in the building you administer.
   - A. Learning centers (see Exhibits A, B, C, D)
   - B. Learning packets (see Exhibits A, B, C, D)
   - C. Student discussion (see Exhibit C)
   - D. Project work (see Exhibits A, B, C, D)
   - E. Other

2. Corridors can be used for tutorial areas. (Check appropriate tutorial activities for selected space.)
   - A. Teacher-student
   - B. Paraprofessional-student
   - C. Student-student
   - D. Volunteer-student
   - E. Machine-student
   - F. Other

3. Corridors can be used for display areas. (Check type display(s) appropriate for selected space.)
   - A. Student art flat (see Exhibit A)
   - B. Student art three dimensional (see Exhibit C)
   - C. Student projects (see Exhibit A and C)
   - D. Curriculum enrichment (see Exhibits A, B, C, D)
   - E. Other
Training Activity

Using the information above, list step-by-step procedures for modifying corridor space to suit your needs.

________________________________________

________________________________________

________________________________________

________________________________________

________________________________________
ACTIVITY 3 (OBJECTIVE 3)

Ways to arrange corridors to accommodate and support individualized instruction.

1. **Learning Centers:**
   Select and set aside an area in corridor just outside classroom. A bulletin board, either portable or fixed, should be available for posting directions for that particular learning center. Such an area may accommodate an individual or a small group. (see Exhibit A)

2. **Learning Packets:**
   In a relatively quiet spot near the classroom, an area can be established for the individual to work on a learning packet. (The learning packet is a highly structured outline designed to teach a concept or a skill.) (see Exhibit B)

3. **Tutorial Area:**
   An area may be utilized in a corridor for an individual or small group to work under the direction of a tutor. The work usually will be a continuation of instruction by the teacher. (see Exhibits A, B, D)

4. **Display Area:**
   Modifications may be made to a corridor in order to provide display space for art work or student projects. Display space may be a bulletin board, a shelf, or an enclosed display case. (see Exhibit C)
Training Activity:

Place a checkmark by the activity or activities most suitable to your needs, then list equipment and materials required to modify the area to meet your needs.

A. Learning centers
B. Learning packets
C. Tutorial areas
D. Display area

---
Complete the post-assessment by utilizing information contained in the packet or from other available sources.

1. List ways results of corridor survey were used. (Activity 1)
   A. 
   B. 
   C. 
   D. 
   E. 

2. List ways corridor space was actually used.
   A. 
   B. 
   C. 
   D. 
   E. 

3. List ways corridor space use has improved individualized instruction.
   A. 
   B. 
   C. 
   D. 
   E. 


4. On the scale below indicate with a checkmark where you judge the corridor space use to be at the school you administer following this learning experience.

[Scale with options: Much Improvement Needed, Little or no Improvement Needed]
AT THIS CENTER YOU CAN
1. MAKE A MODEL OF YOUR DREAM HOUSE
2. SET UP A DISPLAY OF BUILDING MATERIALS SUGGEST ALL WAYS EACH COULD BE USED
3. USE BUILDING BLOCKS TO DESIGN A COMMUNITY OF THE FUTURE
SHELF FOR THREE DIMENSIONAL WORK

BULLETIN BOARD FOR TWO DIMENSIONAL WORK
ALSO MAY ACCOMMODATE LEARNING CENTERS

EXHIBIT C
Display Area
EXHIBIT E
CONSULTANTS

Local Instruction Department
State Department of Education
Local Architects
Area Universities or Colleges
Local Educators
Interior Decorator
EXHIBIT F

SOURCE OF EQUIPMENT

Equipment on Hand
School System Supplies
Maintenance Department of School System
Local Hardware Stores, Lumber Supply Stores
Vocational Schools
Military Surplus Outlets
School Equipment Firms
Books:


Developing a Model for Reorganizing Traditional School Plants for Individualized Instruction

by

Edwin R. Casey
J. Wesley Hardy
Sidney B. Horne
John E. Mobley
John P. Nichols
Billie F. Smith
James D. Turpin
Mildred L. Walton

Submitted in partial fulfillment of the requirements for the degree of Doctor of Education, Nova University

Atlanta Cluster
Dr. R. E. Flanders

Maxi I Practicum
June 16, 1975

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# IMPLEMENTED PACKETS

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<thead>
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<th>PAGE</th>
</tr>
</thead>
<tbody>
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<td>A Plan to Demonstrate How School Corridors Can Be Altered to Accommodate Individualized Instruction</td>
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MOVABLE PARTITIONS

Modify Learning Areas  Support Individualized Instruction

Control

Traffic  Space

Vision  Sound

Fire Safety

Provide

Shelving  Teaching Walls

Cabinetry  Work Surfaces

Fixture Outlets
A PLAN FOR MODIFYING THE CHEROKEE HIGH SCHOOL AUDITORIUM TO PROVIDE FOR ADDITIONAL LEARNING SPACE FOR ENHANCING INDIVIDUALIZED INSTRUCTION AND STUDY FOR STUDENTS

by

Edwin R. Casey
PURPOSE:
To improve individualized instruction in the Cherokee High School by assisting the school administrator in:
1. Assessing the auditorium as learning space.
2. Planning for more flexible use of the auditorium as a learning area.

CONCEPT:
The auditorium consists of a large and expensive area of the school facility and with modification can be utilized as additional learning space. Flexibility and quickness in converting the facility for different uses can be accomplished while retaining its maximum usefulness.

Sub-Concept:
Maximum use of all space within the school, including the auditorium, is a basic concern of school administrators.

OBJECTIVES:
Given the necessary information, the school administrator will be able to:
1. Use the instrument provided for assessing the auditorium as additional learning space.
2. Demonstrate three or more different ways to use the auditorium as learning space.
3. Demonstrate ability to improve flexibility and use of auditorium to accommodate and support individualized instruction and study.

4. Accommodate and support individualized instruction and study by demonstrating ability to use packet.
PRE-ASSESSMENT OF AUDITORIUM USE

Complete the following pre-assessment of the present auditorium use in Cherokee High School. Do not consult any resources in completing this pre-assessment.

1. List three different present uses of the auditorium.
   a. Student assembly
   b. Student study hall
   c. After school student practice and occasional community use

2. List three or more possible uses of auditorium other than those identified above.
   a. Individual and small group study area
   b. Extensions of media center
   c. Tutorial area
   d. Displays and Exhibits

3. List three or more ways to improve learning activities in auditorium space to accommodate and support individualized instruction and study.
   a. Develop auditorium into a satellite of the school media center
   b. Provide for tutorial areas
   c. Provide for display areas
4. Name five pieces of equipment that in your opinion could be used in the auditorium space that may enhance individualized instruction. List two ways that each could be used.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Uses of Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Projector, 16 mm</td>
<td>a1. Large group viewing</td>
</tr>
<tr>
<td></td>
<td>a2. Small group viewing</td>
</tr>
<tr>
<td>b. Cassette tape and/or</td>
<td>b1. Individual programmed learning</td>
</tr>
<tr>
<td>projector</td>
<td>b2. Small group study</td>
</tr>
<tr>
<td>c. Cabinets, bookcases,</td>
<td>c1. Storage of materials and supplies</td>
</tr>
<tr>
<td>and magazine area</td>
<td>c2.</td>
</tr>
<tr>
<td>d. Portable tables and</td>
<td>d1. Individual instruction and study</td>
</tr>
<tr>
<td>chairs</td>
<td>d2. Group instruction and study</td>
</tr>
<tr>
<td>e. Study carrels</td>
<td>e1. Individual study</td>
</tr>
<tr>
<td></td>
<td>e2.</td>
</tr>
</tbody>
</table>

5. Current Status

On the scale below, indicate with a checkmark the present status of the auditorium as it supports and accommodates individualized study.

Much Improvement Needed

Little or no Improvement Needed
ACTIVITY 1 (OBJECTIVE 1)

ASSESSING THE AUDITORIUM FOR ADDITIONAL LEARNING SPACE

1. Sketch of campus showing location of auditorium. (see Figure 1)
2. Sketch of auditorium showing dimensions and capacity. (see Figure 2)
3. Assessment of Facilities

<table>
<thead>
<tr>
<th></th>
<th>Satisfactory</th>
<th>Needs Improving</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Acoustical treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Temperature control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Electrical wiring</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Located away from voice areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>f. Accessible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>g. Reading area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. Student study stations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>i. Shelving for books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Housing for audio-visual equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. Using the information identified in the assessment of facilities, list the improvements needed.
5. Using the list of improvements needed, establish priorities by ranking each item.
ACTIVITY 2 (OBJECTIVE 2)

Ways to use auditorium as learning space in addition to large assembly programs and after school activity practice.

1. Auditorium can be used for individual or small group learning activities:
   - a. Multi-learning center for individual or group
   - b. Individual programmed learning packet
   - c. Student seminars
   - d. Project work
   - e. Other

2. Auditorium can be used as tutorial areas:
   - a. Teacher-student
   - b. Paraprofessional-student
   - c. Volunteer-student
   - d. Student-student
   - e. Other

3. Auditorium can be used for display areas:
   - a. Student art displays
   - b. (1) two dimensional
   - (2) three dimensional
   - c. Student project display
   - d. Student award trophy display
   - e. Other
Now that you have identified additional ways to use the auditorium as a learning space, place a check at the left of those items suitable to your needs.

4. Identify areas in auditorium suitable for individualized instruction and study. Illustrate by use of sketch of auditorium.
   a. Large assembly area
   b. Small group study area
   c. Audio-visual area
   d. Reading area
   e. Individual study area
ACTIVITY 3 (OBJECTIVE 3)

Ways to improve flexibility of auditorium to accommodate and support individualized instruction and study:

1. Multi-learning Center
   a. Make the auditorium into a satellite of the school media center (library) for the benefit of students assigned study hall during the regular school day.
   b. Establish direct inter-phone communication with the media center located across campus.
   c. Transport books, magazines, and other material quickly by a portable cart equipped for this purpose.
   d. Set up a book check-out desk in auditorium.
   e. Construct and arrange special-built bookcases and magazine racks.
   f. Place folding tables and individual study carrels in designated areas.
   g. Plan an area for audio-visual use.
   h. Designate a reading area.
   i. Construct a comfortable portable writing board that fits an arm rest of regular auditorium seat.
2. Learning Packets

In the auditorium there can be designated an area for an individual to work on a learning packet. The packet is a highly structured outline designated to teach a concept or skill.

3. Tutorial Area

An individual or small group may be assigned to work under the direction of a tutor. The work usually will be a continuation of instruction by the teacher. An area in the auditorium can be designated for this purpose.

4. Display Areas

Areas within the auditorium may be made to serve as display space for art work, student projects, and award trophies. The display space may be a bulletin board, or an enclosed display case.
ACTIVITY 4 (OBJECTIVE 4)
POST-ASSESSMENT OF AUDITORIUM USE

Complete the post-assessment by utilizing information contained in this packet or from other sources.

1. List ways you have used the results of the auditorium survey.
   (Activity 1)
   a. As an assessment of the quality and flexibility of the facilities.
   b. For the identification and analysis of the ways the auditorium was being used.
   c. To provide data in helping to make changes in learning space.
   d. To obtain suggestions that helped the author and others become more aware of utilizing flexibility of space in areas other than the auditorium.

2. List ways you have used in providing for additional learning space in the auditorium. (Activity 2)
   a.
   b.
   c.

3. List ways that you have used to improve the flexibility and use of the auditorium to enhance individualized instruction and study.
   a. Extension of the media center.
   b. Individual and small group study area
   c. Film projection area
   d. Tutorial area
4. Check sources that you have actually used.
   - auditorium survey results
   - drawing and illustrations
   - list of possible consultants
   - sources of equipment and supplies

5. Status after use of packet
   On the scale below, indicate with a checkmark where you judge the status of the auditorium as it support and accommodates individualized instruction and study following this experience.

   [ ] Much Improvement Needed
   [ ] Little Improvement Needed

   [ ] Improvement Needed
An arrangement of four conventional classrooms has been created using portable partitions. These sliding panels are suspended from the ceiling and sealed at their base allowing for maximum acoustical advantages.
Flexible partitions easily create a transitional situation, which still retains a conventional classroom or audio/visual area, and a smaller area for seminars, conferences, or teacher preparation.
A quick rearrangement into a plan of open class areas, for common subjects such as U.S. History and American Literature grouped around a resource center. This area is now a useful open plan arrangement which has been derived from the original four conventional classrooms as shown in Exhibit A.
EXHIBIT D

A resource center created from the same grid as shown in Exhibit A, surrounded by learning corners.
A backdrop arrangement creating a class-size stage area and wings. The ease of panel relocation allows daily, even hourly rearrangement to suit the instructional space to the educational program. Note, also a teacher preparation area defined just outside the class area.
EXHIBIT F

SOURCES FOR MOVABLE EQUIPMENT AND SUPPLIES

Peabody North
Manchester, Indiana 46962

Virginia Metal Products
Orange, Virginia 22960

Modernfield
Box 310
New Castle, Indiana 47362

Wenger Corporation
1073-5 Wenger Building
Awatonna, Minnesota 55060

Walker Systems, Inc.
520 South 21st Avenue East
Duluth, Minnesota 55812

Donn Products, Inc.
700 Bassett Rd.
Westlake, Ohio 44145

American Seating Company
Grand Rapids, Michigan 49504

The Macton Corporation
On-the-Airport
Danbury, Connecticut 06810

Brewster Corporation
Old Laybrooks, Connecticut 06475
EXHIBIT G

FREE AND INEXPENSIVE SOURCES OF MATERIALS

State Agencies of Surplus Property

Military Surplus Outlets

Salvage Businesses

Retail Businesses (e.g., grocery stores that discard usable containers, cardboard, etc.)

Utility Companies (cable reels, etc.)

Local Industries (sawmills, lumber yards, etc.)

School Patrons
EXHIBIT H

LOCAL INDUSTRIAL ART AND MAINTENANCE DEPARTMENT

Partitions may be built by the following:

- Industrial art class
- Subject matter class
- Teacher
- Individual Students

Maintenance department could build partitions according to:

1. Individual and class needs
2. School plant architecture
3. Floor space
EXHIBIT I

CONSULTANT AGENCIES

Maintenance Department
State Education Department
Architects

Construction Companies
Open Space Schools
Other Educators
Colleges and Universities
American School and University
Education Facilities Laboratory
U. S. Office of Education
SEF Forum
## EXHIBIT J
### AVAILABLE MATERIALS AND SUPPLIES

<table>
<thead>
<tr>
<th>Item</th>
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<tbody>
<tr>
<td>Bookcases</td>
<td></td>
<td></td>
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<tr>
<td>Storage cabinets</td>
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<td></td>
</tr>
<tr>
<td>Study carrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable Walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalkboards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulletin Boards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crates and Boxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tack Boards</td>
<td></td>
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</tr>
</tbody>
</table>
EXHIBIT K

PRINTED RESOURCES


Elementary School Buildings...Design for Learning, National Education Associations, 1969.

General Considerations for Facility Evaluation, prepared by Georgia State University, 1974.


Places and Things for Experimental Schools, Education Facilities Laboratory, Incorporated, 1972.


School Renewal, Educational Facilities Laboratory, 1971.

The Open Plan School, Education Facilities Laboratory, 1970.


Media Centers

Can be used to:

* Modify Learning Areas
* Support Individualized Instruction
A PLAN TO RELOCATE AND/OR REORGANIZE MEDIA CENTERS TO EXPAND AND/OR FACILITATE INDIVIDUALIZED INSTRUCTION

Implemented By

J. Wesley Hardy
PURPOSE:

The purpose of this learning packet is to improve individualized instruction by making media center information available to the school administrator. In order to fully achieve this purpose, it is deemed necessary to:

1. Assess the environment, space, equipment, and functions of a school media center.
2. Plan for the acquisition of additional equipment and flexibility in the use of present media center facilities.

CONCEPT:

The school media center is a flexible work center designed to enhance the teaching-learning process.

Sub-Concept:

Establishing the status of the existing media center environment, space, equipment, and functions will allow the school administrator to plan for expanded uses of the media center, with greater flexibility.

OBJECTIVES:

Given the necessary information, the school administrator will be able to:

1. Use the instrument provided for assessing the media center environment, space, equipment, functions, and future needs.
2. Analyze learning media center spaces in terms of functions.

3. Demonstrate three ways to rearrange media center space to follow flexibility.

4. Demonstrate ability to improve flexibility and use of media facilities through use of the packet:
   a. media center survey results.
   b. drawings and illustrations.
   c. list of possible consultants.
   d. list of sources for equipment and media center supplies.

5. Accommodate and support individualized instruction by demonstrating ability to use the packet.
PRE-ASSESSMENT OF MEDIA CENTER

Complete the following pre-assessment of the present media center situation in the school that you administer. This is to be completed without reference to outside resources.

1. List three ways the environment of the media center in the school you administer encourages desired learning. (OBJECTIVE 1)
   a. Attractive, colorful and inviting area.
   b. Separate areas to encourage individuals, small groups, and class groups to use the centers' holdings and equipment.
   c. Flexible scheduling

2. List three possible functions of the media center in the school where you administer. (OBJECTIVE 1)
   a. Help students locate, evaluate, and synthesize information for curriculum-related and recreational interests.
   b. Support faculty in provision of materials and equipment and in-service in use of materials and equipment.
   c. Training faculty and students in preparation of materials -- i.e., slides, tapes, transparencies.

3. List three possible ways the media center space can be rearranged to allow flexibility. (OBJECTIVES 1 and 2)
   a. Add more counter-height shelving to divide space into smaller areas for varied activities.
b. Addition and use of glass-enclosed areas.
c. Remove part of one wall to have large opening from general area to periodicals room.

4. List five ways a media center facility can be improved to accommodate and support individual instruction. (OBJECTIVES 4 and 5)
   a. Provision of additional carrels and/or study desks.
   b. Provision of additional space for housing learning packets and/or sets of classroom supplementary materials.
   c. Preparation of area with water and sufficient electrical outlets. Also, materials for students.
   d. In-service with faculty members to improve their understanding of the center and to gain supportive encouragement to students through the faculty.
   e. Acquisition of additional equipment (slide projectors, filmstrip viewers, slide viewers, listening stations, etc.).

5. Name five pieces of equipment in the media center of the school you administer. List two ways the use of each of these pieces of equipment may enhance individualized instruction in the school. (OBJECTIVES 1 and 5)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Uses of Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Portable video tape system</td>
<td>a1. Tape classroom activities (labs, plays, special visitors, etc.)</td>
</tr>
<tr>
<td></td>
<td>a2. Tape special education programs from TV.</td>
</tr>
</tbody>
</table>
b. Filmstrip viewer
b1. To preview filmstrip as to relevance
b2. To make up work when absent

c. Overhead projector
c1. To use existing material to show to entire class
c2. To make posters, graphs, and drawings

d. Slide projector
d1. To economically show experiments, labs, etc.
d2. To have record for other classes to use material developed by one class

e. Audio tape recorder
e1. To let students instantly hear how they sound
e2. To keep record for those not present for make-up work. Could use for reference.

6. Current Status

On the scale below indicate with a checkmark the present status of the media center in the school you administer.

Much Improvement Needed

Little or no Improvement Needed
### ACTIVITY 1  (OBJECTIVES 1 and 2)

#### Assessment of Environment:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Satisfactory</th>
<th>Needs Improving</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Functional in design</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2. Inviting in appearance</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Good lighting</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Acoustical treatment</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>5. Climate control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Floor covering reduces noise</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Adequate wiring available</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>8. Furniture (sized) for students is appropriate</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Assessment of Space:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Satisfactory</th>
<th>Needs Improving</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Located away from noise areas</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Easily accessible to students and teachers</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Permits extended day use without opening entire school</td>
<td></td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>4. Has 800 (Elem.) or 1000 (H.S.) square feet in the library reading room</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Has 240 square feet in a workroom</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>
6. Adequate shelving for required number of books

7. Reading Area
   Elementary 500 students -
   1875 square feet
   900 students -
   2875 square feet
   High School - 1000 students -
   3125 square feet
   1500 students -
   4375 square feet
   2000 students -
   5625 square feet

8. Office space
   150 square feet per librarian

9. Conference room - 150 square feet

10. One conference room for each 500 students

11. Periodical resources storage area (Elementary) not less than 300 square feet - (High School) not less than 1000 square feet
12. Individual Study Stations enough for 30 to 40% of seating capacity

13. Individual study stations are electronically equipped for viewing and listening

14. Housing provided for audiovisual material (minimum 120 square feet over and beyond regular storage space and magazine storage)

15. Media production laboratory (800 to 1000 square feet with sinks, running water, and electrical outlet)

Assessment of Equipment:

Identify the number on hand of the following items of equipment, usually available in a well-stocked media center, in the school that you administer.
<table>
<thead>
<tr>
<th>Item</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 mm sound projector</td>
<td>1 per 4 teaching stations</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 mm projector (only equipment for which</td>
<td>1 per 3 teaching stations</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>materials exist at the appropriate school level should be procured)</td>
<td>plus 15 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 x 2 slide projector</td>
<td>1 per 5 teaching stations</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>remotely controlled</td>
<td>plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filmstrip or combination</td>
<td>1 per 10 teaching stations</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>filmstrip-slide projector</td>
<td>plus 1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound filmstrip projector</td>
<td>1 per 10 teaching stations</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>plus 1 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 x 10 overhead projector</td>
<td>1 per teaching station</td>
<td>18</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opaque projector</td>
<td>1 per 25 teaching stations</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>plus 1 per floor in multi-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>floor buildings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Filmstrip viewer</td>
<td>1 per teaching station</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>plus the equivalent of 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>per 2 teaching stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>in media center in elementary schools and 1 per 3 teaching stations in media center in secondary schools</td>
<td>11</td>
<td>77</td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>----------------------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>2 x 2 slide viewer</td>
<td>1 per 5 teaching stations plus 1 per media center</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>TV receiver (minimum 23 in.</td>
<td>1 per teaching station and 1 per media center where</td>
<td></td>
<td></td>
</tr>
<tr>
<td>screen</td>
<td>programs are available</td>
<td>6</td>
<td>60</td>
</tr>
<tr>
<td>Microprojector</td>
<td>1 per 20 teaching stations</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Record player</td>
<td>1 per teaching station, K-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per grade level, 4 - 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per 15 teaching stations in junior high and secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>schools</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 set of earphones for each player</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>Audio tape recorder</td>
<td>1 per 2 teaching stations in elementary schools plus</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per 10 teaching stations in junior high and secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>schools plus 2 per media center</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 set of earphones for each recorder</td>
<td>38</td>
<td>0</td>
</tr>
</tbody>
</table>

27.1
<table>
<thead>
<tr>
<th>Item</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening station</td>
<td>A portable listening station with 6–10 sets of earphones at the ratio of 1 per 3 teaching stations</td>
<td>4</td>
<td>18</td>
</tr>
<tr>
<td>Projection cart</td>
<td>1 per portable piece of equipment, purchased at the time equipment is obtained</td>
<td>34</td>
<td>0</td>
</tr>
<tr>
<td>Projection screen</td>
<td>1 permanently mounted screen per classroom plus additional screens of suitable size as needed for individual and small group use. The permanent screen should be no smaller than 70 x 70 with keystone eliminator</td>
<td>61</td>
<td>0</td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Closed-circuit television</td>
<td>All new construction should include provisions for installation at each teaching station and media center. Older buildings should be wired for closed-circuit television with initiation of such programs</td>
<td>0</td>
<td>√</td>
</tr>
<tr>
<td>Radio receiver (AM-FM)</td>
<td>1 per media center plus central distribution system (AM-FM)</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Copying machine</td>
<td>1 per 30 teaching stations plus 1 per media center</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Duplicating machine</td>
<td>1 per 30 teaching stations plus 1 per media center</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>Micro-reader (some with microfiche attachment)</td>
<td>Equivalent of 1 per 10 teaching stations to be located in the media center</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Micro-reader printer</td>
<td>1 per media center</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Portable video tape recorder</td>
<td>1 per 15 teaching stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>system (including cameras)</td>
<td>with a minimum of 2 recorders</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Light control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local production equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Items for special consideration

Assessment of Functions:

Interchangeable functions:

1. Small spaces can be converted from seminar to individual study area.

2. Media center is designed to be flexible.

Specific functions:

1. The media center is used by all school subject area personnel

2. The media available supports all subject area personnel

3. Scheduling in the media center provides flexibility for use.
Individual student use:

<table>
<thead>
<tr>
<th></th>
<th>Satisfactory</th>
<th>Needs Improving</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Center is open all day for students</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Study carrels are available for student.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Audio-visual equipment is accessible to student.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. There is flexibility in checking out equipment and material to student.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. There is an easily understood procedure used to obtain use of media center by a student.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Media center is available on an extended day basis for a student.</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. The center does not schedule functions that would interfere with student uses of the media center.</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

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Training Activity:

1. Using the information identified in the assessment of environment, space, equipment, and functions, list the improvements needed:
   a. Acoustical treatment is needed to improve center.
   b. Additional wiring is needed to accommodate existing and future purchased equipment.
   c. Adjacent rooms need to be utilized for classes and conference rooms.
   d. The media laboratory needs to have running water and sink for utilization in preparing visual aids and teaching materials.
   e. Additional space is needed for audio-visual equipment with shelving and cabinets.
   f. Some "blocking" of three corridors needs to be installed in order to make center available for extended day use without opening entire school.

2. Using the list of improvements needed, establish priorities by ranking each item.
   1. f
   2. b
   3. e
   4. d
   5. a
   6. c
ACTIVITY 2 (OBJECTIVE 3)

A. Ways to Arrange Space to Allow Flexibility

1. Flexibility can be accomplished by movable panels, space dividers on rollers, folding and accordion partitions. The teachers and students should be able to easily operate whatever devices are used. The whole process of making the change should not take more than two minutes (see Figure 1).

2. Flexibility can be accomplished by relocating heavy furniture and rearranging other contents of the spaces involved. The same criteria used in number 1 apply, but there will be more time needed for moving.

3. Flexibility can be accomplished by providing new spaces by the use of demountable partitions (see Figure 2).

4. Flexibility can be accomplished by knocking down block partitions, rewiring, and utilizing more effectively the existing facilities (see Figure 3).

B. Training Activity

1. Draw a floor plan model of your present media center.

2. Illustrate two ways you can rearrange the present media center space to allow flexibility.
ARRANGING SPACE TO ALLOW FLEXIBILITY

FIGURE 1

FIGURE 2

FIGURE 3
ACTIVITY 3 (OBJECTIVE 4)

A. Ways to Improve Flexibility and Use of the Media Center Facilities

1. Better utilization of present media center. (refer to Media Center Survey Results)

2. Review drawings and illustrations to see how possible changes may be made to improve present media center. (see Exhibits A, B, C, D, E, F, and G)

3. Confer with specialists in the media center field of study in order to have the expertise available to assist in the role of consultants. (see Consultants Service Agencies list, Exhibit H)

4. Acquire additional equipment to have available in the media center. Use the list of Sources for Equipment and Media Center Supplies. (see Exhibit I)

5. Review printed materials in the media center field to obtain additional information. Use the list of Printed Resources. (see Exhibit J)

B. Training Activity

1. Identify ways the flexibility and use of the media center facilities have improved by the use of the five methods listed above.

   1. Better utilization of present media center. In request for additional wiring, the survey results aided in getting assistance. An adjacent classroom was incorporated as a periodicals room after survey was examined.
2. Possible changes to improve media center:
   - additional acoustical treatment
   - block off hallways to offer extended day use
   - individual study stations could be acquired

3. Specialists in the field of media centers:
   Conferences were held with three of the consultants listed.
   Up-dated ideas, methods, and suggestions were received as well as expertise advice.

4. Additional equipment to enhance media center operation:
   - microprojectors
   - portable listening stations
   - microreader printer
   - portable video tape recorder system
   - 2 x 2 slide projector
   - 10 x 10 overhead projectors
   - filmstrip viewers
   - slide viewers
POST-ASSESSMENT OF MEDIA CENTER

(OBJECTIVE 5)

Complete the post-assessment by utilizing information contained in the packet or from other available sources.

1. List ways you have used the results of the media center survey (Activity 1).
   a. Requested additional electrical outlets, and they are installed.
   b. Rearranged existing carrels to enhance individualization.
   c. Provided in-service for department chairmen about use of facilities.
   d. Held interdepartmental meetings to order equipment so as not to duplicate orders; thus saving money.
   e. Placed priorities according to obvious shortcomings on survey.
   f. Provided space for housing packets developed by teachers.
   g. Justified a request, and expect to have it approved, for water in the media laboratory for preparing materials.
   h. Made plans to use existing classroom as a periodicals room.
   i. Ordered shelving where there was a need.
   j. Made packet and plan available to faculty members to aid in better use of our media center.
2. List ways you have used the survey in rearranging for space and to allow flexibility for individualized instruction. (Activity 2)
   a. All carrels were not stationary. (Wiring caused some to be stationary.)
   b. Movable furniture, such as card catalogs and filing cabinets, were changed in location.
   c. Additional electrical outlets were installed to give mobility of equipment; i.e., filmstrip viewers.

3. List ways that you have used the survey to improve the use of the media center facilities to enhance individualized instruction. (Activity 3)
   a. Consulted with specialists to get ideas as to flexibility.
   b. Invited sales representatives of various companies to bring equipment and ideas for best use in our center.
   c. Provided in-service for faculty, paraprofessionals, and secretaries to fully utilize all school personnel.

4. Check the media center sources that you have actually used.
   ✔ media center survey results
   ✔ drawings and illustrations
   ✔ list of possible consultants
   ✔ sources of equipment and media center supplies
5. Status After Use of Packet

On the scale below indicate with a checkmark where you judge the media center to be at the school you administer following this learning experience.

\[
\begin{array}{c}
\text{Much Improvement Needed} \\
\checkmark \\
\text{Little or no Improvement Needed}
\end{array}
\]
This instructional materials center has facilities for large group instruction and independent study.
EXHIBIT B
Renovated Classrooms
EXHIBIT C

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Media Center features spaces for storytelling, listening, viewing, studying, and reading.
**Exhibit E**

Proposed Changes for Media Center from Existing Classrooms
Media Center converted from classrooms provides separate areas for study, reference, listening, and viewing. Note the small study carrels to the left of the room. Study, reference, listening, and viewing. Note the small study carrels to the left of the room.

EXHIBIT E
EXHIBIT H
CONSULTANT SERVICE AGENCIES

1. Representatives of Media-Center Supply and Equipment Companies
2. State Department of Education Planning Consultants
3. Local School System Planning Consultants
4. Architects - Governmental and Private
5. Cooperative Educational Service Agency Consultants of Georgia
6. State Department of Education, Division of Education Media Services
7. Local School System Department of Educational Media
8. Selected Local Educators
9. Department of Audio-Visual Instruction National Education Association
EXHIBIT I
SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

1. American Library Association
   50 East Huron Street
   Chicago, Illinois 60611

   P. O. Box 388
   Northington, Ohio 40385

3. Avis
   3796 North Decatur Road
   Decatur, Georgia 30033

4. Advanced Business Products
   214 Forsyth Street
   Atlanta, Georgia 30083

5. Baker and Taylor Educational Products
   1391 Chattahoochee Avenue, N.W.
   Atlanta, Georgia 30318

6. Calhoun Company, Inc.
   121 Forrest Avenue, N.E.
   Atlanta, Georgia 30303

7. Cartridge Control Corporation
   2091 Faulkner Road, N.E.
   Atlanta, Georgia 30324

8. Children's Press
   Route 7, Box 460
   Griffin, Georgia 30223

9. Cramer Video
   120 Hampton Avenue
   Needham, Massachusetts 02194

10. Creative Publications
    P. O. Box 10328
     Palo Alto, California 94303

11. Follett Publishing Company
    1010 W. Washington Boulevard
    Chicago, Illinois 60607

12. Frye's Foto Shop
    220 Luckie Street, N.W.
    Atlanta, Georgia 30303
13. Josten's Monarch Book Company
   4070 Shirley Drive
   Atlanta, Georgia 30336

14. Learning Resources Company
   202 Lake Miriam Drive
   Lakeland, Florida 33803

15. MacMillan School Supplies
   415 Buford Highway, N.E.
   Atlanta, Georgia 30345

    1586 Stoneridge Drive
    Stone Mountain, Georgia 30083

17. McCormack-Mathers Publishing Company
    300 Pike Street
    Cincinnati, Ohio 45202

18. Mead School Products
    1391 Chattahoochee Avenue, N.W.
    Atlanta, Georgia 30318

19. Nisewonger's A. V. Center
    1821 Sherwood Drive
    Norcross, Georgia 30071

20. Rand McNally and Company
    P. O. Box 7600
    Chicago, Illinois 60680

21. R. C. A. Service Company
    1901 Mountain Industrial Boulevard
    Tucker, Georgia 30084

22. Rico Industries
    P. O. Box 122
    Calhoun, Georgia 30701

23. School Equipment Dist., Inc.
    319 Monroe Street
    Montgomery, Alabama 36104

24. Scott Foresman Company
    1955 Montreal Road
    Tucker, Georgia 30084
EXHIBIT I (continued)

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

25. Southwest Business Publications Company
   12633 Memorial Drive, Suite 33
   Houston, Texas 77024

26. Science Research Associates
   259 East Erie Street
   Chicago, Illinois 60611

27. The Stevens Company, Inc.
   1021 Columbia Avenue, N.E.
   Atlanta, Georgia 30309

28. Thomas Education Systems
   5369 Saffron Drive
   Atlanta, Georgia 30338

29. Thompson School Book Company of Georgia
   1580 Stoneridge Drive
   Stone Mountain, Georgia 30083

30. Transilwrap Company of Atlanta
    3616 McCall Place
    Doraville, Georgia 30340

31. Visual Systems Company
    3870 North Peachtree Road
    Atlanta, Georgia 30341

32. Walt Disney Educational Media
    Dept. AB-127, 800 Sonora Avenue
    Glendale, California 90201

33. Westbrook Ind. Electronics
    120 Lakeview Drive
    Birmingham, Alabama 35209

34. Wil-Kin Incorporated
    800 Lambert Drive, N.E.
    Atlanta, Georgia 30324
Books and Pamphlets:


PRINTED RESOURCES

Articles:


"Are Study Carrels Practical in Elementary Schools," School Management, 7 (June, 1963), 55 - 57.


Buehler, Ronald G., "How to Help Your Teachers Use the New Media," The Nation's Schools, 70 (July, 1962), 41 - 46.


Ford, Harry J., "The Instructional Resources Center," Audiovisual Instruction, 7 (October, 1963), 524 - 25.


Sylvester, Robert, "Four Steps to a Learning Center," Instructor, 76 (June, 1967), 73 - 84.


Ward, M. T., "Teachers Are Using MM Centers," The Instructor, 77 (June - July, 1968), 120.
EXHIBIT J ..........(continued)

PRINTED RESOURCES


A PLAN FOR ARRANGING TRADITIONAL CLASSROOMS TO FACILITATE THE INDIVIDUALIZATION OF INSTRUCTION

Science Center

Group A

Group B

Group C

Social Studies & Art Center

Math Center
A PLAN TO REORGANIZE A TRADITIONAL CLASSROOM TO ENHANCE INDIVIDUAL INSTRUCTION WITHIN THE CLASSROOM

by

Sidney B. Horne
PURPOSE:
The purpose of this packet is to improve administrator's skill in:
1. Assessing the degree to which classrooms facilitate the individualization of instruction process.
2. Arranging traditional classrooms to reinforce the individualization of instruction process.

CONCEPT:
Educational space can be cued with objects and behaviors to embody new meanings that have significance for the individualized learning process.

Sub-Concept:
It is possible to arrange the learning facilities to reinforce the individualized curriculum, and for the individualized curriculum to grow from the facilities.

OBJECTIVES:
Given the information in this packet, administrators will be able to:
1. Perform a pre-assessment of adequacy for existing classrooms in five areas.
2. Use the suggested strategies to arrange a classroom to facilitate the individualized process.
ACTIVITY 1 (OBJECTIVE 1)
PRE-ASSESSMENT

Complete the following pre-assessment of the classrooms in the school you administer. This should be completed without reference to outside resources.

1. List three ways the classroom furniture supports the learning objectives.
   a. Good for the purpose for which designed (group).
   b. Provides each student with a seat.
   c. The teacher is the director of the group.

2. List three ways the spatial arrangement may be revised to allow more flexibility.
   a. Removal of traditional student desks and use tables and chairs.
   b. Use of study carrels, divider shelves, etc.
   c. Develop learning centers.

3. List three functions that are accommodated by the learning centers:
   a. Group instruction
   b. Individual student work
   c. Bulletin board and blackboard

4. List three storage areas for teacher and student-made materials.
   a. Desks
   b. Closets
   c. Shelves
5. Name five pieces of equipment in the classroom. List two ways each piece may enhance individualized instruction.

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Use of Equipment</th>
</tr>
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<td>b. Student desks (30)</td>
<td>b1. Student seat</td>
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<td>c. File cabinet</td>
<td>c1. Storage</td>
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<td>d. Chalkboard</td>
<td>d1. Direction</td>
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<tr>
<td>e. Bulletin board</td>
<td>e1. Display</td>
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6. Current Status

On the scale below, indicate with a checkmark the present status of the classroom as it accommodates and supports individualized instruction.

```
Much Improvement Needed
      /                             Little or no Improvement Needed
      \
```

[Handwritten input]
7. Notes and Comments
   
   Needed - Removal of student desks - bring in tables and chairs.
   
   Rearrange furniture to establish learning center.
   
   Corners good for small group work.
   
   Study carrels will accommodate eight students at once.
   
   Use video recorder to set up "studio."
ACTIVITY 2 (OBJECTIVE 2)

Study the following categories for improving classroom space:

1. Provide a variety of portable, lightweight, and sturdy furniture - - - tables, chairs, desks, bookcases, and cabinets on casters.

2. Arrange tables, chairs, and desks in a flexible manner that:
   a. correlates with activities.
   b. permits face-to-face interaction.
   c. defines access routes.

3. Remove the teacher's desk from the front or rear of the room to an adjacent space that does not suggest a place of surveillance by a guard.

4. Place small chalkboards and tack boards near carrels and work stations for student use.

5. Disperse the media center into mini-resource centers within classrooms.
   a. Maintain a central media resource center.
   b. Invest in duplicate copies of books, records, games, newspapers, and audio-visual equipment.

6. Construct learning centers in different sizes and shapes from cardboard, plywood, or any sturdy material.

7. Display centers on a table, bulletin board, wall, floor, or suspend them from the ceiling.
8. Use portable units to partition into interest areas.
9. Provide space for a variety of media -- projector, tape recorder, television, radio, camera, teletype terminal, computer terminal, duplicating machine, and picture telephone.
10. Mount raceways on the ceiling, floor, or walls if additional conduits are needed to accommodate cables and conductors.
11. Provide storage space for contracts, student folders, learning kits, and other materials.
ACTIVITY 3 (OBJECTIVE 2)

FURNITURE AND EQUIPMENT INVENTORY

The logical first step to determining classroom adequacy is to inventory all furniture and equipment. From this inventory, the administrator will be able to assess the degree to which the facilities support the objectives of the individualized process. Moreover, he will be in a better posture to defend requests for additional equipment.

EXPLANATION OF COLUMN NUMBERED ITEMS

Column (1) - Stock Number: Fill in stock number, if available, from equipment catalog, or other source.

Column (2) - Department: For example, English, Social Studies, etc. Elementary schools may substitute grades.

Column (3) - Description: Use the equipment catalog, order, invoices, requisitions to give information.

Column (4) - Serial Numbers: Give vital identification information for all serialized equipment.

Column (5) - Room Number: Enter room number here.

Column (6) - Quantity: Enter correct quantity under correct room number.

Column (7) - Total Quantity: Total all quantities listed.

Column (8) - Unit Cost: Check equipment catalog.

Column (9) - Total Cost: Multiply (7), Total Quantity, by Column (8), Unit Cost, and enter correct Total Cost.
Classroom Furniture

Stacking Chairs

Movable Chair Desks

Chair Desks

Multi-Drawer Cabinets

Oak Utility Tables

Teacher's Arm Chair

Multi-Purpose Tables and Chairs

Adjustable Tables

F.O.B. Factory

Grouping Adaptability
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Northwoods School

Furniture and Equipment Inventory

School Code: 290

Date: April 1, 1975

Total Quantity: 290

Total Cost: 1975
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**Northwoods School**

**Furniture and Equipment Inventory**

**Date:** April 11, 1975
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<tr>
<td>BOOKCASE, 32&quot; w x 72&quot; h, Natural Wood</td>
<td></td>
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<td></td>
<td></td>
<td>35.96</td>
<td>18.10</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>BOOKCASE, 42&quot; w x 36&quot; h, Natural Wood</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

School Name: Northwoods School
Furniture and Equipment Inventory

Date: April 1, 1975
School Code: 290

Note: The image contains a table with columns for description, department, stock number, room number, unit cost, and total cost. The table details the inventory of furniture, including bookcases of different sizes and prices.
ACTIVITY 4 (OBJECTIVE 3)
POST-ASSESSMENT OF CLASSROOM ADEQUACY
(use one sheet for each classroom)

<table>
<thead>
<tr>
<th>A. FURNITURE</th>
<th>SATISFACTORY</th>
<th>NEEDS IMPROVING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Movable</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>2. Well-constructed</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>3. Variety of types</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>4. Assorted sizes</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>5. Desks</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>6. Chairs</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>7. Tables</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>8. Bookcases</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>9. Carrels</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>10. Dividers</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

| B. Spatial Arrangement           |              |                 |
| 1. Lends flexibility             | ✓            |                 |
| 2. Supports activities           | ✓            |                 |
| 3. Encourages interaction        | ✓            |                 |
| 4. Defines access routes         | ✓            |                 |
| 5. Provides adjacent placement of teacher's desk | ✓ | |

| C. Centers                       |              |                 |
| 1. Well-constructed              | ✓            |                 |
| 2. Functional                    | ✓            |                 |
| 3. Attractive                    | ✓            |                 |
D. Storage Cabinets
   1. Instructional media
   2. Student folders
   3. Work samples

E. Structural Miscellany
   1. Lighting
   2. Climate control
   3. Electrical outlets
   4. Acoustical treatment
   5. Bulletin boards
   6. Chalkboards
ACTIVITY 5 (OBJECTIVE 3)

1. List ways you have used the results of your Classroom Adequacy Assessment to improve the individualization process.
   a. Removed traditional furniture - replaced
   b. Constructed study carrels
   c. Constructed divider shelves
   d. Established learning centers
   e. Made room more colorful and attractive

2. On the scale below, mark with a checkmark where your program was before you began this learning experience and an X where you judge it to be presently.

   1 1 1 1 1 1

   0 1 2 3 4 5
EXHIBIT B

RESOURCES

HUMAN RESOURCES
1. The resource staff of the local school system
2. The resource staff of the State Department of Education
3. Staff of schools implementing the process
4. Consultants from colleges and universities

MATERIAL RESOURCES:
Bell, J. W., "Individualizing Instruction at the High School Level," The High School Journal, April, 1959, p. 252.
"Profile: Found Space," p. 27.
MOVABLE PARTITIONS

Modify Learning Areas  Support Individualized Instruction

Control

Traffic  Space

Vision  Sound

Fire Safety

Provide

Shelving, Teaching Walls

Cabinetry  Work Surfaces

Fixture Outlets

324
A PLAN TO DEMONSTRATE HOW PORTABLE PARTITIONS CAN BE USED TO ACCOMMODATE INDIVIDUALIZED INSTRUCTION

by

John E. Mobley
MOVABLE PARTITIONS

PURPOSE:
The purpose of this packet is to improve the administrator's skill in:

1. Assessing to what extent movable partitions are presently used.
2. Assessing the present school plant to determine if movable partitions can be implemented.
3. Planning for the construction of purchase and installation of movable partitions.

CONCEPT:
Individualized instruction can be complemented if maximum use of existing floor space is utilized.

Sub-Concept:
A school administrator should know how to locate and use movable partitions.

OBJECTIVES:
Given the necessary information, a school administrator will be able to:

1. Use the instrument provided to assess present conditions and determine how and where movable partitions can be used.
2. Demonstrate three ways movable partitions can be used to enhance individualized instruction.
3. List resource materials, outlets, and commercial supplies through exhibits -- movable partitions through the use of packet:
   a. drawings and illustrations
   b. list of mobile partition suppliers
   c. list of other free and inexpensive sources
   d. list of possible consultant service agencies
   e. mobile partition survey results

4. Use this packet to accommodate and support individualized instruction.
PRE-ASSESSMENT OF MOVABLE FURNITURE

(Do not consult any resources in completing this pre-assessment.)

1. List five kinds of movable partitions in your building.
   a. bookcases
   b. chalkboards
   c. desks
   d. tack boards
   e. study carrels

2. List three possible uses of movable partitions rather than use identified above.
   a. separate student for individualized instruction
   b. traffic flow
   c. separation of classes

3. List three ways to obtain movable partitions to accommodate and support individualized instruction.
   a. purchase them
   b. build them
   c. improvise or have them donated

4. On the scale below indicate with a checkmark the present status of movable partitions that accommodate and support individualized instruction.

   [ ] Much Improvement Needed
   [x] Little Improvement Needed
   [ ] or no Improvement Needed
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use separate sheet for each kind of movable partition identified.)

✓ Bookcases

___ Movable Chalkboards

___ Storage Cabinets

___ Bulletin Boards

___ Study Carrels

___ Screens

___ Movable Ceiling to Floor Wall

___ Crates and Boxes

___ Desks

___ Tack Boards

___ Easels

___ Other

1. Number on hand 36

2. Size varying

3. Location library and classrooms

4. Present use of unit

5. Are the results being used to accommodate and support individualized instruction? If so, how? No

6. Notes and Comments

Individualized instruction is presently taking place at the student's desk or table.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

- Bookcases
- Movable Chalkboards
- Storage Cabinets
- Bulletin Boards
- Study Carrels
- Screens
- Movable Ceiling to Floor Wall
- Crates and Boxes
- Desks
- Tack Boards
- Easels
- Other

1. Number on hand 26
2. Size varying
3. Location library and classrooms
4. Present use of unit storage of teacher supplies
5. Are the units being used to accommodate and support individualized instruction? If so, how? No
6. Notes and Comments

Could be used for individualized instruction if located in such a manner to partition a small section of the room.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

_____ Bookcases  _____ Movable Chalkboards
_____ Storage Cabinets  _____ Bulletin Boards
_____ Study Carrels  _____ Screens
_____ Movable Ceiling to Floor Walls  _____ Crates and Boxes
_____ Desks  _____ Easels  _____ Other

1. Number on hand  12
2. Size  varying
3. Location  reading room
4. Present use of unit  individual study area
5. Are the units being used to accommodate and support individualized instruction? If so, how?  Yes
6. Notes and Comments

Additional units need to be purchased for other rooms in the school plant.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

<table>
<thead>
<tr>
<th>Movable Partition Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookcases</td>
</tr>
<tr>
<td>Storage Cabinets</td>
</tr>
<tr>
<td>Study Carrels</td>
</tr>
<tr>
<td>Movable Ceiling to Floor Wall</td>
</tr>
<tr>
<td>Desks</td>
</tr>
<tr>
<td>Easels</td>
</tr>
<tr>
<td>Movable Chalkboards</td>
</tr>
<tr>
<td>Bulletin Boards</td>
</tr>
<tr>
<td>Screens</td>
</tr>
<tr>
<td>Crates and Boxes</td>
</tr>
<tr>
<td>Tack Boards</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

1. Number on hand  0
2. Size  none
3. Location  none
4. Present use of unit  none
5. Are the units being used to accommodate and support individualized instruction? If so, how?  No
6. Notes and Comments

A movable ceiling to floor wall could be used to open space for large group activities.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

___ Bookcases  ___ Movable Chalkboards
___ Storage Cabinets  ___ Bulletin Boards
___ Study Carrels  ___ Screens
___ Movable Ceiling to Floor Wall  ___ Crates and Boxes
___ Desks  ___ Tack Boards
___ Easels  ___ Other

1. Number on hand 61
2. Size "A" frame desks
3. Location in all classrooms
4. Present use of unit traditional and individualized instruction
5. Are the units being used to accommodate and support individualized instruction? If so, how? Yes Individual and group activities
6. Notes and Comments
Desks are presently being used for individualized instruction, but improvements could be made by creating more privacy and less eye contact and noise.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

____ Bookcases
____ Movable Chalkboards
____ Storage, Cabinets
____ Bulletin Boards
____ Study Carrels
____ Screens
____ Movable Ceiling to Floor Wall
____ Crates and Boxes
____ Desks
____ Tack Boards
____ Other

1. Number on hand: 5

2. Size: varying

3. Location: library and classrooms

4. Present use of units: display

5. Are the units being used to accommodate and support individualized instruction? If so, how? No

6. Notes and Comments:

Easels could be arranged to reduce eye contact and regulate traffic flow.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(use one sheet for each kind of movable partition identified)

____ Bookcases
____ Storage Cabinets
____ Study Carrels
____ Movable Ceiling to Floor Wall
____ Desks
____ Easels

____ Movable Chalkboards
____ Bulletin Boards
____ Screens
____ Crates and Boxes
____ Tack Boards
____ Other

1. Number on hand 2

2. Size varying

3. Location classrooms

4. Present use of unit instructional instrument

5. Are the units being used to accommodate and support individualized instruction? If so, how? No

6. Notes and Comments

Movable chalkboards could be used to isolate certain areas for privacy and regulation of traffic flow.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

- Bookcases
- Storage Cabinets
- Study Carrels
- Movable Ceiling to Floor Wall
- Desks
- Easels

Movable Chalkboards
- Bulletin Boards
- Screens
- Crates and Boxes
- Tack Boards
- Other

1. Number on hand 26
2. Size varying
3. Location classrooms
4. Present use of unit display
5. Are the units being used to accommodate and support individualized instruction? If so, how? Demonstration and information
6. Notes and Comments

Bulletin boards could be made portable or attached to the back of movable chalkboards in order to provide information, save space, and create individualized instructional space.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

- Bookcases
- Storage Cabinets
- Study Carrels
- Movable Ceiling to Floor Wall
- Desks
- Easels
- Movable Chalkboards
- Bulletin Boards
- Screens
- Crates and Boxes
- Tack Boards
- Other

1. Number on hand: 10
2. Size: varying
3. Location: library and classrooms
4. Present use of unit: showing of films and slides
5. Are the units being used to accommodate and support individualized instruction? If so, how? Yes, but only in isolated instances.
6. Notes and Comments
   Screens could be used to show films and slides and also to block off areas for individualized study and activity.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

_____ Bookcases
_____ Storage Cabinets
_____ Study Carrels
_____ Movable Ceiling to Floor Wall
_____ Desks
_____ Easels

_____ Movable Chalkboards
_____ Bulletin Boards
_____ Screens
_____ Crates and Boxes
_____ Tack Boards
_____ Other

1. Number on hand 70.

2. Size varying

3. Location Library and classrooms

4. Present use of unit storage

5. Are the units being used to accommodate and support individualized instruction? If so, how? No

6. Notes and Comments

Boxes and crates could be arranged to provide areas for individualized instruction and regulation of traffic flow.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

___ Bookcases
___ Storage Cabinets
___ Study Carrels
___ Movable Ceiling to Floor Wall
___ Desks
___ Easels

1. Number on hand 12
2. Size varying
3. Location classrooms
4. Present use of unit
5. Are the units being used to accommodate and support individualized instruction? If so, how? Yes Informational purposes
6. Notes and Comments
   Unless made portable, they could be used for little else than they are presently utilized.
MOVABLE PARTITION SURVEY INSTRUMENT

ACTIVITY 1 (OBJECTIVE 1)

(Use one sheet for each kind of movable partition identified.)

- Bookcases
- Storage Cabinets
- Study Carrels
- Movable Ceiling to Floor Wall
- Desks
- Easels
- Movable Chalkboards
- Bulletin Boards
- Screens
- Crates and Boxes
- Tack Boards
- Other

1. Number on hand \textit{varying}
2. Size \textit{varying}
3. Location \textit{classrooms}
4. Present use of unit \textit{varying}
5. Are the units being used to accommodate and support individualized instruction? If so, how? \textit{Yes, in some cases}
6. Notes and Comments

Some teachers have brought in sofas, chairs, tables, and other items which are being used to separate certain areas for individual and small group instruction.
ACTIVITY 2 (OBJECTIVE 2)

I. Indicate the manner in which your school could use movable partitions in the modification of learning areas.
(See Figures 1, 2, 3, 4, 5, and 6)

1. Large Group Activities
   a. ✓ Regulate distance between groups
   b. ✓ Accommodate traffic flow
   c. ✓ Provide additional space for multi-class uses
   d. ✓ Control visual contact
   e. ✓ Expand visual contact
   f. ✓ Regulate noise level

2. Small Group Activities (single classroom)
   a. ✓ Regulate distance between groups
   b. ✓ Provide privacy
   c. ✓ Regulate noise level
   d. ✓ Control visual contact

3. Individual Activities
   a. ✓ Audio-visual applications
   b. ✓ Personal counseling
   c. ✓ Privacy
   d. ✓ Independent study
   e. ✓ Reduce visual contact
II. Display and Informational Purposes

1. √ Walls used for bulletin boards, chalkboards, and projection screens
2. √ Used to hang shelves and cabinets

III. Absorb Noise

1. √ Reduce noise between classes
2. √ Reduce noise between classroom and traffic flow
3. √ Reduce noise between individuals in classroom activities
4. √ Seal off electronic audio noise

IV. Utilize Large Open Space

1. Gymnasium
2. Auditorium
3. Stage
4. Corridors
5. Cafeteria
6. Library
7. √ Laboratories

Now that you have identified ways to use movable partitions, place a checkmark at the left of those items suitable to your needs.
ACTIVITY 3 (OBJECTIVE 3)

Ways to obtain movable partitions:

1. Purchase commercially (Exhibit F)
2. Free and inexpensive sources (Exhibit G)
3. Local industrial art and maintenance department (Exhibit H)
4. Consultant services (Exhibit I)
5. Use of available materials and equipment (Exhibit J)

Comments:

Refer to Printed Resources (Exhibit K) for additional information.

Each exhibit was reviewed and studied for its applicability to the needs of the Open Campus School. Some ideas were adopted from the exhibits and some ideas were contributed to them.
POST-ASSESSMENT

ACTIVITY 4 (OBJECTIVE 4)

Use the information contained in this packet or from any outside source in completing your assessment.

1. Having completed your pre-assessment, identify the four most practical partitions in the school you administer that could be put on rollers and made movable.
   a. Movable chalkboards
   b. Movable bulletin boards
   c. Movable walls
   d. Movable bookcases

2. List five ways that movable partitions can be used in the school you administer to accommodate individualized instruction (Activity 2).
   a. Regulated distance between groups
   b. Accommodate traffic flow
   c. Control visual contact
   d. Regulate noise level
   e. Audio-visual application
3. **What sources could you or have you used in your effort to implement movable partitions.**
   b. Free or inexpensive sources - local patrons and businesses.
   c. Local industrial art or maintenance department - extensive use of the maintenance department.
   d. Consultant services - the school maintenance engineer helped considerably in designing and having built the items constructed.
   e. Available materials and equipment - the staff found that many items on hand could be used for partitions; e.g., boxes and crates, desks, chairs, and chalkboards.

4. On the scale below indicate with a checkmark the present status of movable partitions that accommodate and support individualized instruction.

   ![Scale](image)

   **Much Improvement Needed**
   **Little Improvement Needed**

Comments:

Some improvements have been made, but there is much room for development.
An arrangement of four conventional classrooms has been created using portable partitions. These sliding panels are suspended from the ceiling and sealed at their base allowing for maximum acoustical advantages.
Flexible partitions easily create a transitional situation, which still retains a conventional classroom or audio/visual area, and a smaller area for seminars, conferences, or teacher preparation.
A quick rearrangement into a plan of open class areas, for common subjects such as U. S. History and American Literature grouped around a resource center. This area is now a useful open plan arrangement which has been derived from the original four conventional classrooms as shown in Exhibit A.
EXHIBIT D

A resource center created from the same grid as shown in Exhibit A, surrounded by learning corners.
A backdrop arrangement creating a class-size stage area and wings. The ease of panel relocation allows daily, even hourly rearrangement to suit the instructional space to the educational program. Note, also a teacher preparation area defined just outside the class area.
EXHIBIT F
SOURCES FOR MOVABLE EQUIPMENT AND SUPPLIES

Peabody North
Manchester, Indiana 46962

Virginia Metal Products
Orange, Virginia 22960

Modernfield
Box 310
New Castle, Indiana 47362

Wenger Corporation
1073-5 Wenger Building
Awatonna, Minnesota 55060

Walker Systems, Inc.
520 South 21st Avenue East
Duluth, Minnesota 55812

Donn Products, Inc.
700 Bassett Rd.
Westlake, Ohio 44145

American Seating Company
Grand Rapids, Michigan 49504

The Macton Corporation
On-the-Airport
Danbury, Connecticut 06810

Brewster Corporation
Old Laybrooks, Connecticut 06475
EXHIBIT G
FREE AND INEXPENSIVE SOURCES OF MATERIALS

State Agencies for Surplus Property

Military Surplus Outlets

Salvage Businesses

Retail Businesses (e.g., grocery stores that discard usable containers, cardboard, etc.)

Utility Companies (cable reels, etc.)

Local Industries (sawmills, lumber yards, etc.)

School Patrons
EXHIBIT H

LOCAL INDUSTRIAL ART AND MAINTENANCE DEPARTMENT

Industrial art class projects to build partitions
Subject matter class to build partitions
Teacher to build partitions
Individual students to build partitions
Maintenance department to build partitions according to:

1. Individual and class needs
2. School plant architecture
3. Floor space
EXHIBIT I

CONSULTANT AGENCIES

Maintenance Department
State Education Department
Architects
Construction Companies
Open Space Schools
Other Educators
Colleges and Universities
American School and University
Education Facilities Laboratory
U. S. Office of Education
SEF Forum
### EXHIBIT J

**AVAILABLE MATERIALS AND SUPPLIES**

<table>
<thead>
<tr>
<th>Item</th>
<th>Number</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookcases</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Storage Cabinets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study Carrels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portable Walls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Desks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chalkboards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulletin Boards</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Screens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crates and Boxes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tack Boards</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
EXHIBIT K

PRINTED RESOURCES


Elementary School Buildings...Design for Learning, National Education Associations, 1969.

General Considerations for Facility Evaluation, prepared by Georgia State University, 1974.


Places and Things for Experimental Schools, Education Facilities Laboratory, Incorporated, 1972.


School Renewal, Educational Facilities Laboratory, 1971.

The Open Plan School, Education Facilities Laboratory, 1970.


MOBILE FURNITURE

Modify Learning Areas
- Bookcases
- Listening Stations

Support Individualized Instruction
- Dividers
- Cabinets
A PLAN TO UTILIZE MOBILE, MULTIPLE-USE FURNITURE TO FACILITATE AND ACCOMMODATE INDIVIDUALIZED INSTRUCTION

by

John P. Nichols
PURPOSE:
The purpose of this packet is to improve school administrator skills in:
1. Assessing the quantity of mobile furniture in their building.
2. Assessing the present use of mobile furniture in their building.

CONCEPT:
School furniture is mobile and has multiple uses.

Sub-Concept:
Identification of mobile school furniture, present uses, and planning for better uses is a basic concern of school administrators.

LEARNING OBJECTIVES:
Given the necessary information, school administrators will be able to:
1. Use the instrument provided for assessing mobile furniture quantity, use, and future needs.
2. Demonstrate three different ways to use mobile furniture in the modification of learning areas.
3. Demonstrate ability to improve the quantity and use of mobile furniture through the use of packet:
   a. drawings and illustrations
   b. lists of mobile furniture suppliers
   c. lists of other free and inexpensive sources
   d. lists of possible consultant agencies
   e. mobile furniture survey results.

4. Accommodate and support individualized instruction by demonstrating his ability to use the packet.
PRE-ASSESSMENT OF MOBILE FURNITURE

(Do not consult any resources in completing this pre-assessment.)

1. List five different kinds of mobile furniture in your building and present use of each. (Objective 1)
   a. Flat top desks - (student desks).
   b. Portable chalkboards (group instruction and sectioning rooms).
   c. Portable room dividers (sectioning rooms).
   d. Cabinets (storage of supplies).
   e. Bookcases (storage of books).

2. List three different possible uses of mobile furniture other than uses identified above. These uses must be applicable in the modification of learning areas. (Objective 2)
   a. Redefine classroom boundaries.
   b. Displays.
   c. Projection screens

3. List three ways to obtain mobile furniture needed to accommodate and support individualized instruction. (Objectives 3 and 4)
   a. Purchase furniture with school or Board of Education funds.
   b. Have furniture built by district maintenance shop.
   c. Purchase furniture or building materials with P. T. A. funds.
4. Place a checkmark on the scale of the present status of mobile furniture in the school you administer.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- __ Bookcases
- __ Listening Stations
- __ Room Dividers
- __ Storage Cabinets
- __ Multi-Purpose Storage Cabinets
- __ Other flat top desks

1. Total number of units on hand ______ 22

2. Size of units

   - Small
   - Medium (____ 22)
   - Large

3. Location of units

   - Regular classrooms (____ 18)
   - Library
   - Special classrooms (____ 4)
   - Teacher work areas
   - Other, list

4. Present use of units ______ Student learning projects and student desks

5. Are the units identified being used to accommodate and support individualized instruction? If so, how? ______ Moderate support

6. Notes and comments ______ Provisions will be made to provide more desks.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT
(Use one sheet for each kind of mobile furniture identified.)

Check One:

____ Bookcases
____ Listening Stations
____ Multi-Purpose Storage Cabinets
____ Room Dividers
____ Storage Cabinets

1. Total number of units on hand 3

2. Size of units
   1 Small
   1 Medium
   1 Large

3. Location of units
   1 Regular classrooms
   1 Library
   2 Special classrooms
   1 Teacher work areas
   1 Other, list ____________

4. Present use of units One board is used as divider and for instruction,
   whereas other two are used for instruction only.

5. Are the units identified being used to accommodate and support
   individualized instruction? If so, how? One unit moderate, other two
   minimum.

6. Notes and comments Quantity needs to be increased.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Listening Stations
- Room Dividers
- Storage Cabinets
- Multi-Purpose Storage Cabinets
- Other

1. Total number of units on hand 8

2. Size of units
   - 2 Small
   - 4 Medium
   - 2 Large

3. Location of units
   - 2 Regular classrooms
   - 2 Library
   - 4 Special classrooms
   - Teacher work areas
   - Other, list

4. Present use of units Room Dividers

5. Are the units identified being used to accommodate and support individualized instruction? If so, how? Moderate support by providing areas conducive to individual work.

6. Notes and comments Increase use of dividers for use of displays and learning centers. Quantity needs to be increased.
### ACTIVITY 1 (OBJECTIVE 1)

**MOBILE FURNITURE SURVEY INSTRUMENT**

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Listening Stations
- Room Dividers
- Storage Cabinets
- Multi-Purpose Storage Cabinets
- Other

1. Total number of units on hand: 2

2. Size of units
   - Small
   - Medium
   - Large

3. Location of units
   - Regular classrooms
   - Special classrooms
   - Library
   - Teacher work areas
   - Other, list

4. Present use of units: Storage of science equipment and supplies.

5. Are the units identified being used to accommodate and support individualized instruction? If so, how: Little or none

6. Notes and comments: Quantity needs to be increased. The units need to be placed in regular classrooms equipped as learning centers.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

✓ Bookcases

_ Storage Cabinets

_ Listening Stations

_ Multi-Purpose Storage Cabinets

_ Room Dividers

_ Other

1. Total number of units on hand __11__

2. Size of units

1 Small

3 Medium

7 Large

3. Location of units

9 Regular classrooms

_ Library

2 Special classrooms

_ Teacher work areas

_ Other, list

4. Present use of units Storage of books

5. Are the units identified being used to accommodate and support individualized instruction? If so, how? Little or none

6. Notes and comments Quantity needs to be increased. Plan to use more for displays and dividers.
ACTIVITY 2 (OBJECTIVE 2)

WAYS TO USE MOBILE FURNITURE IN THE MODIFICATION OF LEARNING AREAS

1. Mobile furniture can be used for dividing or sectioning the classroom.
   A. Sectioning Provides
      1. Individual student work areas
      2. Small group work areas
      3. Quiet thinking areas
      4. Balance between quiet and noisy work areas
      5. Active learning atmosphere
   B. Training Activity
      1. Using mobile furniture identified in your Mobile Furniture Survey, draw a floor plan model which reflects the five concepts listed above. (Use a separate sheet of paper.)
      NOTE: I liked my floor plan so well that I implemented it in an open space area (the center of a pod). Photographs are attached (see plan for implementing packet).
      2. List some areas in your building where your floor plan model can be used.
         1. Special classrooms
         2. Regular classrooms
         3. Open space areas
         4. Work areas
II. Mobile furniture can be used for displaying pertinent materials.

A. Possible Display Uses

1. Display student work on backs of the mobile furniture.
2. Display instructions for using the learning area.
4. Three-dimensional display and demonstration space through proper placement of the mobile furniture.

B. Training Activity

1. List the mobile furniture identified in your Mobile Furniture Survey under the proper category.

<table>
<thead>
<tr>
<th>Flat Display of Student Work</th>
<th>Use as Projection Screens</th>
<th>Three-Dimensional Display Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. portable chalkboards</td>
<td>a. cabinets</td>
<td>a. desks</td>
</tr>
<tr>
<td>b. room dividers</td>
<td>b. room dividers</td>
<td>b. cabinets</td>
</tr>
<tr>
<td>c. bookcases</td>
<td>c. chalkboards</td>
<td>c. bookcases</td>
</tr>
<tr>
<td>d.</td>
<td>d. bookcases (back)</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>e.</td>
<td></td>
</tr>
</tbody>
</table>

III. Mobile furniture can be used for storage of pertinent materials and supplies.

A. Possible Storage Uses

1. Materials storage
2. Supplies storage
3. Equipment storage

B. Training Activity

1. Present mobile furniture can best be used for storage of:
<table>
<thead>
<tr>
<th>Materials</th>
<th>Supplies</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. desks</td>
<td>a. cabinets</td>
<td>a. bookcases</td>
</tr>
<tr>
<td>b. _____</td>
<td>b. bookcases</td>
<td>b. cabinets</td>
</tr>
<tr>
<td>c. _____</td>
<td>c. _______</td>
<td>c. _______</td>
</tr>
</tbody>
</table>

2. Now that you have identified units available, place a checkmark by those units you plan to use for storage purposes.
ACTIVITY 3 (OBJECTIVE 3)

WAYS TO OBTAIN MOBILE FURNITURE NEEDED TO ACCOMMODATE AND SUPPORT INDIVIDUALIZED INSTRUCTION

1. Have local industrial arts or maintenance departments construct (see Exhibits A, B, C, D, E).

2. Purchase commercially (see list of suppliers, Exhibit F).

3. Ask others for assistance (see Consultant Service Agencies lists, Exhibit G).

4. Obtain from free and inexpensive sources materials for constructing mobile furniture (see list of sources, Exhibit F).

5. Use present furniture (see results of Mobile Furniture Survey).

Comments:

Refer to Printed Resources (Exhibit H) for additional information.
ACTIVITY 4 (OBJECTIVE 4)

POST-ASSESSMENT OF MOBILE FURNITURE

(You may use information contained in the packet or other outside sources in completing the post-assessment.)

1. List ways you have used the results of your Mobile Furniture Survey (Activity 1).
   a. Identified existing mobile furniture.
   b. Identified use of existing mobile furniture.
   c. Identified needs.
   d. Results used in planning changes for use of mobile furniture.
   e. Used results in the development and implementation of a plan to convert an open area (non-instructional) into a reading area.

2. List ways sectioning, displaying, and storage uses of mobile furniture have improved individualized instruction (Activity 2).
   a. Prompted teacher interest in mobile furniture and individualized instruction.
   b. Identified more and better ways to use mobile furniture.
   c. In individualizing instruction.
   d. Provided for more efficient use of space.
   e. 
3. Check the mobile furniture sources which you actually used (Activity 3).

- Units built by local maintenance department
- Commercial suppliers
- Consultant agencies
- Free and inexpensive sources
- Mobile furniture survey results

4. On the scale below, mark with a checkmark the status of the mobile furniture in the school you administer after the use of the learning packet.

[ ] [ ] [ ] [ ] [X] [ ] [ ]

Much Improvement Needed

Little or no Improvement Needed
EXHIBIT A

Mobile Multi-Utility Cabinet

Lockable Casters

All shelves adjustable
EXHIBIT B

Mobile Dividers - Open Space Program
EXHIBIT C

Mobile Listening Station
EXHIBIT D

Mobile Multi-Purpose Bookshelf
EXHIBIT E
Mobile Storage and Multi-Purpose Unit
EXHIBIT F

SOURCES OF SUPPLIES

Free and Inexpensive Supplies

Furniture Stores (discarded cardboard containers)

Hardware Stores (discarded scrap materials)

Cabinets Shops (discarded scrap lumber)

Vocational Schools (free supervised student labor)

Military Surplus Outlets (inexpensive surplus)

Furniture Factory Outlets (damaged inexpensive items)

Catalog Resources

Becklev-Cardy

Brooke & Garrett

C. B. New: Standard School, Inc.

Ellman's

MacMillan School Supplies

J. C. Penny Co.

Pyramid Buyer's Guide

Sears, Roebuck and Co.
EXHIBIT G
CONSULTANT AGENCIES

Representatives of furniture supply companies
State Department of Education and local school planning consultants
Architects (governmental and private)
Selected local educators
Cooperative Service Agency consultants
EXHIBIT H

PRINTED RESOURCES


Dean, Joan, A Place to Paint, New York: Citation Press, 1973, pp. 1-48.

Dean, Joan, Working Space, New York: Citation Press, 1973, pp. 1-47.


Cassettes
Camera
Recorders
Reading
VIDEO TAPE RECORDERS
16mm PROJECTOR
FILMS
PROJECTORS
Study Prints
FILMSTRIPS
OVERHEAD PROJECTOR

Can be used to:
* Modify Learning Areas
* Support Individualized Instruction

STUDY MATE
AUDIO CASSETTE PROGRAMS
8mm Film Loops
Opaque Projector
Records
HEADPHONES
STUDY PRINTS
Transparencies
BOOKS
Listening Centers
Record Players
Centers
A PLAN TO RELOCATE AND/OR REORGANIZE MEDIA CENTERS TO EXPAND AND/OR FACILITATE INDIVIDUALIZED INSTRUCTION

Implemented By

Billie F. Smith
PURPOSE:

The purpose of this learning packet is to improve individualized instruction by making media center information available to the school administrator. In order to fully achieve this purpose, it is deemed necessary to:

1. Assess the environment, space, equipment, and functions of a school media center.
2. Plan for the acquisition of additional equipment and flexibility in the use of present media center facilities.

CONCEPT:

The school media center is a flexible work center designed to enhance the teaching-learning process.

Sub-Concept:

Establishing the status of the existing media center environment, space, equipment, and functions will allow the school administrator to plan for expanded uses of the media center, with greater flexibility.

OBJECTIVES:

Given the necessary information, the school administrator will be able to:

1. Use the instrument provided for assessing the media center environment, space, equipment, functions, and future needs.
2. Analyze learning media center spaces in terms of functions.

3. Demonstrate three ways to rearrange media center space to follow flexibility.

4. Demonstrate ability to improve flexibility and use of media facilities through use of the packet:
   a. media center survey results.
   b. drawings and illustrations.
   c. list of possible consultants.
   d. list of sources for equipment and media center supplies.

5. Use this packet to accommodate and support individualized instruction.
PRE-ASSESSMENT OF MEDIA CENTER

Complete the following pre-assessment of the present media center situation in the school that you administer. This is to be completed without references to outside resources.

1. List three ways the environment of the media center encourages desired learning. (OBJECTIVE 1)
   a. Reference materials are grouped where older children may use.
   b. Tables and chairs are available for viewing of filmstrips or reading.
   c. Quiet atmosphere for concentration.

2. List three possible functions of the media center. (OBJECTIVE 1)
   a. Distribution of books. Teach students how to use library.
   b. Research
   c. Audio-visual materials to supplement and support individualized classroom instruction.

3. List three possible ways the media center space can be rearranged to allow flexibility.
   a. Rearrange table and chairs.
   b. Provide study carrels.
   c. Arrange for small group discussions and study.
4. List five ways a media center facility can be improved to accommodate and support individual instruction. (OBJECTIVES 4 and 5)
   a. Provide opportunities for students to pursue their studies independently.
   b. Provide small work areas so two to five students could work as a group.
   c. Provide area for large group instruction.
   d. Provide a wide selection of printed and non-printed materials.
   e. Provide an open schedule, making facility accessible to students.

5. Name five pieces of equipment in the media center. List two ways the use of each of these pieces of equipment may enhance individualized instruction. (OBJECTIVES 1 and 5)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Uses of Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Filmstrips</td>
<td>a1. Pictures for slow readers - learning tool</td>
</tr>
<tr>
<td></td>
<td>a2. Enrichment - moving students at own rate</td>
</tr>
<tr>
<td>b. Cassette player-recorder</td>
<td>b1. Aids slow readers</td>
</tr>
<tr>
<td></td>
<td>b2. Take notes - also record and listen for mistakes in doing oral reports; spelling</td>
</tr>
<tr>
<td>c. Overhead projector</td>
<td>c1. Show transparencies to groups</td>
</tr>
<tr>
<td></td>
<td>c2. Answer key for assignments</td>
</tr>
</tbody>
</table>
6. Current Status

On the scale below indicate with a checkmark the present status of the school's media center as it accommodates and supports individual instruction.

- [ ] Much Improvement
- [ ] Little or no Improvement

Need

Need
ACTIVITY 1 (OBJECTIVES 1 and 2)

NEEDS ASSESSMENT

Assessment of Environment:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Satisfactory</th>
<th>Needs Improving</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Functional in design</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Inviting in appearance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Good lighting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Acoustical treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Climate control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Floor covering reduces noise</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Adequate wiring-available</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Furniture (sized) for students is appropriate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Assessment of Space:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Satisfactory</th>
<th>Needs Improving</th>
<th>Unsatisfactory</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Located away from noise areas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Easily accessible to students and teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Permits extended day use without opening entire school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Has 800 (elementary) or 1000 (high school) square feet in the library reading room</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Has 240 square feet in a workroom

6. Adequate shelving for required number of books

7. Reading area
   - Elementary 500 students -
     - 1875 square feet
   - 900 students -
     - 2875 square feet

   - High School 1000 students -
     - 3125 square feet
   - 1500 students -
     - 4375 square feet
   - 2000 students -
     - 5625 square feet

8. Office space - 150 square feet per librarian

9. Conference room - 150 square feet

10. One conference room for each 500 students

11. Periodical resources storage area
   - (elementary) not less than 300 square feet - (high school) not less than 1000 square feet
12. Individual study stations enough for 30 to 40% of seating capacity

13. Individual study stations are electronically equipped for viewing and listening

14. Housing provided for audio-visual material (minimum 120 square feet) over and beyond regular storage space and magazine storage

15. Media production laboratory (800 to 1000 square feet with sinks, running water, and electrical outlet)

Assessment of Equipment:

Identify the number on hand of the following items of equipment, usually available in a well-stocked media center.

<table>
<thead>
<tr>
<th>Item</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>16 mm sound projector</td>
<td>1 per 4 teaching stations plus 2 per media center</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>8 mm projector</td>
<td>1 per 3 teaching stations plus 15 per media center</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

Only equipment for which materials exist at the appropriate school level should be procured.
<table>
<thead>
<tr>
<th>Item</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 2 slide projector</td>
<td>1 per 5 teaching stations plus 2 per media center</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Filmstrip or combination filmstrip-slide projector</td>
<td>1 per 10 teaching stations plus 1 per media center</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Sound filmstrip projector</td>
<td>1 per 10 teaching stations plus 1 per media center</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>10 x 10 overhead projector</td>
<td>1 per teaching station plus 2 per media center</td>
<td>24</td>
<td>1</td>
</tr>
<tr>
<td>Opaque projector</td>
<td>1 per 25 teaching stations plus 1 per floor in multi-floor buildings</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Filmstrip viewer</td>
<td>1 per teaching station plus the equivalent of 1 per 2 teaching stations in media center in elementary schools and 1 per 3 teaching stations in media center in secondary schools</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>----------------------------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>2 x 2 slide viewer</td>
<td>1 per 5 teaching stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>plus 1 per media center</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>TV receiver</td>
<td>1 per teaching station and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per media center where programs are available</td>
<td>20</td>
<td>4</td>
</tr>
<tr>
<td>Microprojector</td>
<td>1 per 20 teaching stations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Record player</td>
<td>1 per teaching station, K-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per grade level, 4-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 per 15 teaching stations in junior high and secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>schools</td>
<td>29</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>3 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 set of earphones for each player</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Audio tape recorder</td>
<td>1 per 2 teaching stations in elementary schools plus 2 per media center</td>
<td>26</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>1 per 10 teaching stations in junior high and secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>schools plus 2 per media center</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1 set of earphones for each recorder</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

395
**Item**

<table>
<thead>
<tr>
<th>Listening station</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A portable listening station with 6 - 10 sets of earphones at the ratio of 1 per 3 teaching stations</td>
<td>40</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projection cart</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 per portable piece of equipment, purchased at the time equipment is obtained</td>
<td>48</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Projection screen</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 permanently mounted screen per classroom plus additional screens of suitable size as needed for individual and small group use. The permanent screen should be no larger than 70 x 70 with keystone eliminator.</td>
<td>25</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Closed-circuit television</th>
<th>Basic Recommendation</th>
<th>Number on Hand</th>
<th>Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>All new construction should include provisions for installation at each teaching station and media center. Older buildings should be wired for closed-circuit television with initiation of such programs.</td>
<td>0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Basic Recommendation</td>
<td>Number on Hand</td>
<td>Needed</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>---------------------------------------</td>
<td>----------------</td>
<td>--------</td>
</tr>
<tr>
<td>Radio receiver (AM-FM)</td>
<td>1 per media center plus central distribution system (AM-FM)</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Copying machine</td>
<td>1 per 30 teaching stations plus 1 per media center</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Duplicating machine</td>
<td>1 per 30 teaching stations plus 1 per media center</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Micro-reader (some with microfiche attachment)</td>
<td>Equivalent of 1 per 10 teaching stations to be located in the media center</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Micro-reader printer</td>
<td>1 per media center</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Portable video tape recorder system</td>
<td>1 per 15 teaching stations with a minimum of 2 recorders per building</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Light control</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Local production equipment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Items for special consideration</td>
<td>1. dry mount press - tacking iron</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. visual maker</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. over 1,000 filmstrips</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. over 1,000 transparencies</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Assessment of Functions:

Interchangeable functions:

1. Small spaces can be converted from seminar to individual study area. 
   - Satisfactory
   - Improving
   - Unsatisfactory

2. Media center is designed to be flexible. 
   - Satisfactory
   - Improving
   - Unsatisfactory

Specific functions:

1. The media center is used by all school subject area personnel.
   - Satisfactory
   - Improving
   - Unsatisfactory

2. The media available supports all subject area personnel. 
   - Satisfactory
   - Improving
   - Unsatisfactory

3. Scheduling in the media center provides flexibility for use. 
   - Satisfactory
   - Improving
   - Unsatisfactory

Individual student use:

1. Center is open all day for students. 
   - Satisfactory
   - Improving
   - Unsatisfactory

2. Study carrels are available for any student. 
   - Satisfactory
   - Improving
   - Unsatisfactory

3. Audio-visual equipment is accessible to student. 
   - Satisfactory
   - Improving
   - Unsatisfactory
4. There is flexibility in checking out equipment and materials to students.

5. There is an easily understood procedure used to obtain use of media center by a student.

6. Media center is available on an extended day basis for a student.

7. The center does not schedule functions that would interfere with student uses of the media center.

Training Activity:

1. Using the information identified in the assessment of environment, space, equipment, and functions, list the improvements needed.

2. Using the list of improvements needed, establish priorities by ranking each item.
ACTIVITY I
TRAINING ACTIVITY
LIST OF IMPROVEMENTS NEEDED

Assessment of Functional Needs:
1. Study carrels
2. Scheduling to provide flexibility for use
3. Small spaces that can be converted from seminar to individual study area.

Assessment of Equipment Needs:

<table>
<thead>
<tr>
<th>Number Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

1. Projection cart
2. Closed-circuit television
3. Record players
4. 2 x 2 slide projector, remotely controlled
5. 16 mm projector
6. Sound filmstrip projector
7. Overhead projector
8. Opaque projector
9. TV receiver
10. Filmstrip viewer
11. Duplicating machine
12. Portable video tape recorder system
Assessment of Environmental Needs:

**1. Acoustical treatment

**2. Floor covering to reduce noise

**3. Furniture (sized for students)

**4. Climate control

**5. Improved lighting

**6. Functional in design improved

**7. Inviting appearance improved

Assessment of Space Needs:

**1. A workroom

**2. Additional shelving

**3. Additional reading area

**4. Additional office area

**5. Conference room

**6. Periodical resource storage

**7. Individual study stations

**8. Housing for A-V materials

**9. Media production lab with running water, sinks, and electrical outlets.

Priorities Established:

* To be completed during the first year of implementation.

** To be completed during the second year of implementation.

*** To be completed by the end of the third year of implementation.

**** To be completed by the end of the fourth year of implementation.
ACTIVITY 2 (OBJECTIVE 3)

A. Ways to Arrange Space to Allow Flexibility

1. Flexibility can be accomplished by movable panels, space dividers on rollers, folding and accordion partitions. The teachers and students should be able to easily operate whatever devices are used. The whole process of making the change should not take more than two minutes (see Figure 1).

2. Flexibility can be accomplished by relocating heavy furniture and rearranging other contents of the spaces involved. The same criteria used in number 1 apply, but there will be more time needed for moving.

3. Flexibility can be accomplished by providing new space by the use of demountable partitions (see Figure 2).

4. Flexibility can be accomplished by knocking down block partitions, rewiring, and utilizing more effectively the existing facilities (see Figure 3).

B. Training Activity

1. Draw a floor plan model of your present media center.

2. Illustrate two ways you can rearrange the present media center space to allow flexibility. (See Exhibit 1)
ACTIVITY 3 (OBJECTIVE 4)

A. Ways to Improve the Flexibility and Use of the Media Center Facilities

1. Better utilization of present media center. (refer to Media Center Survey Results)

2. Review drawings and illustrations to see how possible changes may be made to improve present media center. (see Exhibits A, B, C, D, E, F, and G)

3. Confer with specialists in the media center field of study in order to have the expertise available to assist in the role of consultants. (see Consultant Service Agencies list, Exhibit H)

4. Acquire additional equipment to have available in the media center. Use the list of Sources for Equipment and Media Center Supplies. (see Exhibit I)

5. Review printed materials in the media center field to obtain additional information. Use the list of Printed Resources. (see Exhibit J)

B. Training Activity

1. Identify ways the flexibility and use of the media center facilities have improved by the use of the five methods listed above.
ARRANGING SPACE TO ALLOW FLEXIBILITY

FIGURE 1

FIGURE 2

FIGURE 3
EXHIBIT K

PROPOSED PLAN FOR IMPLEMENTATION
DURING SECOND YEAR (1975-76)

KEY
1. Workroom with running water
2. Remove existing wall
3. Listening and viewing area
4. Audio-visual
5. Study cabinets
6. Class and study area
7. Moveable dividers (bookcases)
8. Office

OTHER IMPROVEMENTS
A. Carpet installed to reduce noise
B. Climate control installed
C. Some furniture added
   - Sized for primary children
D. Improved lighting installed
E. Periodical resource
ARRANGING SPACE TO ALLOW FLEXIBILITY AND INDIVIDUAL STUDY STATIONS

EXHIBIT L

ACTIVITY TWO

Floor Plan of Present Media Center

PLAN ONE

PLAN TWO

Independent Study

Movable Divider

Viewing and Listening Area

Conference Small Group

Office & Workroom

Charging

Reading Area

Viewing Area

Conference Room

Office & Workroom

Charging

Study Carrels

Filmstrip Viewer

Television
ACTIVITY 3 RESPONSE

1. New ideas for making the media center more flexible from the review of drawings, illustrations, printed resources.

2. Conferences were held with three of the consultants listed. Updated ideas, methods, and suggestions were received as well as expertise advice.

3. The media center was improved and made more flexible by the purchase of additional equipment from sources listed in Exhibit 1.

4. Better utilization of present media center has been developed as a result of the media center survey. A four-year plan of implementation has been developed and presented. Funds for the first and second year plans have already been allocated.
POST-ASSESSMENT OF MEDIA CENTER

(OBJECTIVE 5)

Complete the post-assessment by utilizing information contained in the packet or from other available resources.

1. List ways you have used the results of the media center survey (Activity 1).
   a. Developed and implemented an open schedule for media center.
   b. Identified present media center environment, space, equipment, and functions.
   c. Identified media center needs:
   d. Used results to develop a four-year plan to improve the flexibility and use of media center (see following page).
   e. Purchased additional equipment.
   f. Rearranged media center to support individualized instruction.
PLAN OF IMPLEMENTATION DURING THE FIRST YEAR

1. Purchase and install study carrels.
2. Improve scheduling, by implementing an open schedule for students.
3. Arrange present media center so small spaces for individual study or small group study are available.
4. Purchase 10 filmstrip viewers.
5. Rearrange present media center to make it more functional in design.
6. Attach cork squares to ends of bookcases for display areas. Plan for other display areas to improve appearance.
7. Provide a conference room by converting an office that is presently part of the administrative offices and joins the media center.
8. Purchase a slide projector remotely controlled.
10. Purchase a visual maker.

PLAN OF IMPLEMENTATION DURING THE SECOND YEAR

1. Expand media center as designed in the drawing (Exhibit K) of Activity 2, Part B. This plan has been presented and approved for implementation.
2. Reassess, and if enrollment merits, the following items will be purchased:
   a. One overhead projector
   b. Nine projector carts
   c. Two record players
   d. Two slide projectors
   e. One opaque projector
   f. One portable video tape recorder system
   g. Two TV receivers
   h. Two sound filmstrip projectors
   i. One 16 mm projector

   PLAN OF IMPLEMENTATION DURING THE THIRD YEAR

1. Reassess needs, and if enrollment merits, the following items will be purchased:
   a. Nine projector carts
   b. Two slide projectors, remotely controlled
   c. Two 16 mm projectors
   d. One sound filmstrip projector
   e. Two TV receivers
   f. One duplicating machine

   PLAN OF IMPLEMENTATION DURING THE FOURTH YEAR

1. Reasses needs, and if enrollment merits, the following items will be purchased:
   a. Two slide projectors, remotely controlled
b. Two 16 mm projectors

2. Install a closed-circuit television.
2. List ways you have used in rearranging for space and to allow flexibility for individualized instruction. (Activity 2)
   a. Provided more areas so more activities can be conducted simultaneously by movable divider.
   b. Relocation of heavy furniture to allow greater flexibility.
   c. Recommended that a wall be removed and an additional classroom space be added to the media center as new space.

3. List ways that you have used to improve the use of the media center facilities to enhance individualized instruction. (Activity 3)
   a. Purchased study carrels.
   b. Purchased additional printed and non-printed materials.
   c. Studied media center survey results and developed a plan to be implemented during the 1975-76 school year.

4. Check the media center sources that you have actually used.
   ____ media center survey results
   ____ drawings and illustrations
   ____ list of possible consultants
   ____ sources of equipment and media center supplies

5. Status After Use of Packet
   On the scale below indicate with a checkmark where you judge the media center program to be following this learning experience.

[ ] _______ Much Improvement or no Improvement Needed
[ ] _______ Some Improvement Needed
[ ] _______ Needed Improvement
[ ] _______ Little Improvement Needed
This instructional materials center has facilities for large group instruction and independent study.
EXHIBIT B
Renovated Classrooms
Media Center features spaces for storytelling, listening, viewing, studying, and reading.
Proposed Changes for Media Center from Existing Classrooms
EXHIBIT F

Media Center converted from classrooms provides separate areas for storytelling, class and study, reference, listening, and viewing. Note the small study carrels to the far right of the room.
CONSULTANT SERVICE AGENCIES

1. Representatives of Media Center Supply and Equipment Companies
2. State Department of Education Planning Consultants
3. Local School System Planning Consultants
4. Architects - Governmental and Private
5. Cooperative Educational Service Agency Consultants of Georgia
6. State Department of Education, Division of Education Media Services
7. Local School System Department of Educational Media
8. Selected Local Educators
9. Department of Audio-Visual Instruction National Education Association
EXHIBIT I

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

1. American Library Association
   50 East Huron Street
   Chicago, Illinois  60611

   P. O. Box 388
   Northington, Ohio  40385

3. Avis
   3796 North Decatur Road
   Decatur, Georgia 30033

4. Advanced Business Products
   214 Forsyth Street
   Atlanta, Georgia  30083

5. Baker and Taylor Educational Products
   1391 Chattahoochee Avenue, N.W.
   Atlanta, Georgia 30318

6. Calhoun Company, Inc.
   121 Forrest Avenue, N.E.
   Atlanta, Georgia 30303

7. Cartridge Control Corporation
   2091 Faulkner Road, N.E.
   Atlanta, Georgia 30324

8. Children’s Press
   Route 7, Box 460
   Griffin, Georgia 30223

9. Cramer Video
   120 Hampton Avenue
   Neheam, Massachusetts 02194

10. Creative Publications
    P. O. Box 10328
    Palo Alto, California  94303

11. Follett Publishing Company
    1010 W. Washington Boulevard
    Chicago, Illinois  60607

12. Frye's Foto Shop
    220 Luckie Street, N.W.
    Atlanta, Georgia 30303
EXHIBIT I (continued)

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

13. Josten's Monarch Book Company  
    4070 Shirley Drive  
    Atlanta, Georgia 30336

14. Learning Resources Company  
    202 Lake Miriam Drive  
    Lakeland, Florida 33803

15. MacMillan School Supplies  
    415 Buford Highway, N.E.  
    Atlanta, Georgia 30345

    1586 Stoneridge Drive  
    Stone Mountain, Georgia 30083

17. McCormack-Mathers Publishing Company  
    300 Pike Street  
    Cincinnati, Ohio 45202

18. Mead School Products  
    1391 Chattahoochee Avenue, N.W.  
    Atlanta, Georgia 30318

19. Nisewonger's A. V. Center  
    1821 Sherwood Drive  
    Norcross, Georgia 30071

20. Rand McNally and Company  
    P. O. Box 7600  
    Chicago, Illinois 60680

21. R. C. A. Service Company  
    1901 Mountain Industrial Boulevard  
    Tucker, Georgia 30084

22. Rico Industries  
    P. O. Box 122  
    Calhoun, Georgia 30701

23. School Equipment Dist., Inc.  
    319 Monroe Street  
    Montgomery, Alabama 36104

24. Scott Foresman Company  
    1955 Montreal Road  
    Tucker, Georgia 30084
EXHIBIT I (continued)

SOURCES FOR EQUIPMENT AND MEDIA CENTER SUPPLIES

25. Southwest Business Publications Company
   12633 Memorial Drive, Suite 33
   Houston, Texas 77024

26. Science Research Associates
   259 East Erie Street
   Chicago, Illinois 60611

27. The Stevens Company, Inc.
   1021 Columbia Avenue, N.E.
   Atlanta, Georgia 30309

28. Thomas Education Systems
   5369 Saffron Drive
   Atlanta, Georgia 30338

29. Thompson School Book Company of Georgia
   1580 Stoneridge Drive
   Stone Mountain, Georgia 30083

30. Transilwrap Company of Atlanta
    3616 McCall Place
    Doraville, Georgia 30340

31. Visual Systems Company
    3870 North Peachtree Road
    Atlanta, Georgia 30341

32. Walt Disney Educational Media
    Dept. AB-127, 800 Sonora Avenue
    Glendale, California 90201

33. Westbrook Ind. Electronics
    120 Lakeview Drive
    Birmingham, Alabama 35209

34. WHI-Kin Incorporated
    800 Lambert Drive, N.E.
    Atlanta, Georgia 30324
Books and Pamphlets:


Articles:


"Are Study Carrels Practical in Elementary Schools," School Management, 7 (June, 1963), 55 - 57.

Beggs, David W., III, "Organization Follows Use... The Instructional Materials Center," Audiovisual Instruction, 9 (November, 1964), 602 - 4.


Buehler, Ronald G., "How to Help Your Teachers Use the New Media," The Nation's Schools, 70 (July, 1962), 41 - 46.


Sylvester, Robert, "Four Steps to a Learning Center," Instructor, 76 (June, 1967), 73 - 84.


Ward, M. T., "Teachers Are Using MM Centers," The Instructor, 77 (June - July, 1968), 120.

MOBILE FURNITURE

Modify Learning Areas

- Bookcases
- Listening Stations

Support Individualized Instruction

- Dividers
- Cabinets
A PLAN TO USE MOBILE, MULTIPLE-USE FURNITURE TO FACILITATE AND ACCOMMODATE INDIVIDUALIZED INSTRUCTION

by

James D. Turpin
PURPOSE:
The purpose of this packet is to improve school administrator skills in:

1. Assessing the quantity of mobile furniture in their building.
2. Assessing the present use of mobile furniture in their building.

CONCEPT:
School furniture is mobile and has multiple uses.

Sub-Concept:
Identification of mobile school furniture, present uses, and planning for better uses is a basic concern of school administrators.

LEARNING OBJECTIVES:
Given the necessary information, school administrators will be able to:

1. Use the instrument provided for assessing mobile furniture quantity, use, and future needs.
2. Demonstrate three different ways to use mobile furniture in the modification of learning areas.
3. Demonstrate ability to improve the quantity and use of mobile furniture through the use of packet.
   a. drawings and illustrations
   b. lists of mobile furniture suppliers
   c. lists of other free and inexpensive sources
   d. lists of possible consultant service agencies
   e. mobile furniture survey results

4. Accommodate and support individualized instruction by demonstrating his ability to use the packet.
PRE-ASSESSMENT OF MOBILE FURNITURE

(Do not consult any resources in completing this pre-assessment.)

1. List five different kinds of mobile furniture in your building and present use of each. (Objective 1)
   a. Study carrels - (learning centers).
   b. Portable Room Dividers - (sectioning rooms).
   c. Bookcases - (storage of books).
   d. Storage Cabinets - (storage of supplies).
   e. Flat top desks - (student desks).
   f. Portable chalkboards - (small group teaching).

2. List three different possible uses of mobile furniture other than uses identified above. These uses must be applicable in the modification of learning areas. (Objective 2)
   a. Projection screens.
   b. Display of flat and 3-D materials.
   c. Redefine the structure of the classrooms.

3. List three ways to obtain mobile furniture needed to accommodate and support individualized instruction. (Objectives 3 and 4)
   a. Have district carpenter shop build to specifications.
   b. Purchase commercial unit with Board of Education funds.
   c. Purchase materials using P. T. A. funds, ask parents to help build.
4. Place a checkmark on the scale of the present status of mobile furniture in the school you administer.

[Scale with checkmark]
### ACTIVITY 1 (OBJECTIVE 1)

**MOBILE FURNITURE SURVEY INSTRUMENT**

(Use one sheet for each kind of mobile furniture identified.)

<table>
<thead>
<tr>
<th>Furniture Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bookcases</td>
<td>30</td>
</tr>
<tr>
<td>Listening Stations</td>
<td>30</td>
</tr>
<tr>
<td>Room Dividers</td>
<td>30</td>
</tr>
<tr>
<td>Storage Cabinets</td>
<td>17</td>
</tr>
<tr>
<td>Multi-Purpose Storage Cabinets</td>
<td>13</td>
</tr>
<tr>
<td>Other</td>
<td>17</td>
</tr>
</tbody>
</table>

1. **Total number on hand** 30

2. **Size of units**
   - Small: 30
   - Medium: 30
   - Large: 17

3. **Location of units**
   - Regular classrooms: 17
   - Library: 13
   - Special classrooms: 13
   - Teacher work areas: 17
   - Other, list: 17

4. **Present use of units** Mostly for learning centers. Moderate support.

5. **Are the units identified being used to accommodate and support individualized instruction? If so, how?** Yes, learning centers using records, tapes, filmstrips. These are the ways the present stations are being used.

6. **Notes and comments** Stations could be used to a greater extent as room dividers and display boards.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT
(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Storage Cabinets
- Listening Stations
- Multi-Purpose Storage Cabinets
- Room Dividers
- Other

1. Total number units on hand 22

2. Size of units
   - Small
   - Medium 22
   - Large

3. Location of units
   - 18 Regular classrooms
   - Library
   - 4 Special classrooms
   - Teacher work areas
   - Other, list

4. Present use of units Mostly as room dividers. Moderate support.

5. Are the units identified being used to accommodate and support individualized instruction? If so, how? Yes, by providing areas conducive to individual and small group work.

6. Notes and comments Room dividers need to be used more for display purposes.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

√ Bookcases
□ Storage Cabinets
□ Listening Stations
□ Multi-Purpose Storage Cabinets
□ Room Dividers
□ Other

1. Total number of units on hand: 9

2. Size of units
   1 Small
   5 Medium
   3 Large

3. Location of units
   5 Regular classrooms
   □ Library
   4 Special classrooms
   □ Teacher work areas
   □ Other, list


5. Are the units identified being used to accommodate and support individualized instruction? If so, how? No

6. Notes and comments: More units needed. Plans are to have district carpenter shop build several for next year. Also, plans are to use bookcases more as dividers, 3-D display purposes, and storage of other learning materials other than books.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Listening Stations
- Room Dividers
- Storage Cabinets
- Multi-Purpose Storage Cabinets
- Other

1. Total number of units on hand: 3

2. Size of units
   - Small
   - Medium
   - Large: 3

3. Location of units
   - Regular classrooms
   - Library
   - Special classrooms: 3
   - Teacher work areas
   - Other, list

4. Present use of units: To store art supplies in the art room.

5. Are the units identified being used to accommodate and support individualized instruction? If so, how? Minimum support.

6. Notes and comments: Plans are to obtain more units and a need exists to place these units in regular classrooms.
ACTIVITY 1 (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Listening Stations
- Room Dividers
- Storage Cabinets
- Multi-Purpose Storage Cabinets
- Other flat top desks

1. Total number of units on hand 33

2. Size of units
   - Small
   - 33 Medium
   - Large

3. Location of units
   - 14 Regular classrooms
   - Library
   - 19 Special classrooms
   - Teacher work areas
   - Other, list

4. Present use of units
   - Student desks, typewriters, and student learning projects.

5. Are the units identified being used to accommodate and support individualized instruction? Is so, how?
   - Minimum support

6. Notes and comments
   - Board of Education will be asked to provide more desks.
   - Desks need to be rearranged so they can be used for demonstration purposes.
ACTIVITY 1° (OBJECTIVE 1)

MOBILE FURNITURE SURVEY INSTRUMENT

(Use one sheet for each kind of mobile furniture identified.)

Check One:

- Bookcases
- Listening Stations
- Storage Cabinets
- Multi-Purpose Storage Cabinets
- Room Dividers
- Other portable chalkboards

1. Total number of units on hand: 3

2. Size of units:
   - Small: [ ]
   - Medium: [✓]
   - Large: [ ]

3. Location of units:
   - Regular classrooms: [ ]
   - Library: [ ]
   - Special classrooms: [ ]
   - Teacher work areas: [ ]
   - Other, list: [ ]

4. Present use of units: To aid in the teaching of small groups.

5. Are the units identified being used to accommodate and support individualized instruction? If so, how? Minimum support.

6. Notes and comments: Need to be used more as room dividers, display areas. Also, quantity needs to be increased.
ACTIVITY 2 (OBJECTIVE 2)

WAYS TO USE MOBILE FURNITURE IN THE MODIFICATION OF LEARNING AREAS

1. Mobile furniture can be used for dividing or sectioning the classroom.
   
   A. Sectioning Provides
      1. Individual student work areas
      2. Small group work areas
      3. Quiet thinking areas
      4. Balance between quiet and noisy work areas
      5. Active learning atmosphere
   
   B. Training Activity
      1. Using mobile furniture identified in your Mobile Furniture Survey draw a floor plan model which reflects the five concepts listed above. (Use a separate sheet of paper.) Each teacher could draw a floor plan using units in her classroom.
      2. List some areas in your building where your floor plan model can be used.
         1. Regular classrooms
         2. Special classrooms
         3. Work areas
II. Mobile furniture can be used for displaying pertinent materials.

A. Possible Display Uses
   1. Display student work on backs of the mobile furniture
   2. Display instructions for using the learning area
   3. Projection screens
   4. Three-dimensional display and demonstration space through proper placement of the mobile furniture.

B. Training Activity
   1. List the mobile furniture identified in your Mobile Furniture Survey under the proper category.

<table>
<thead>
<tr>
<th>Flat Display of Student Work</th>
<th>Use as Projection Screens</th>
<th>Three-Dimensional Display Space</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. study carrels</td>
<td>a. room dividers</td>
<td>a. bookcases</td>
</tr>
<tr>
<td>b. room dividers</td>
<td>b. bookcases (backs)</td>
<td>b. storage cabinets</td>
</tr>
<tr>
<td>c. bookcases</td>
<td>c. cabinets (backs)</td>
<td>c. flat top desks</td>
</tr>
<tr>
<td>d. portable chalkboards</td>
<td>d. chalkboards</td>
<td></td>
</tr>
<tr>
<td>e.</td>
<td>e.</td>
<td></td>
</tr>
</tbody>
</table>

III. Mobile furniture can be used for storage of pertinent materials and supplies.

A. Possible Storage Uses
   1. Materials storage
   2. Supplies storage
   3. Equipment storage
B. Training Activity

1. Present mobile furniture can best be used for storage of:

<table>
<thead>
<tr>
<th>Materials</th>
<th>Supplies</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔ desks</td>
<td>✔ bookcases</td>
<td>a. storage cabinets</td>
</tr>
<tr>
<td></td>
<td>b. carrels</td>
<td>✔ bookcases</td>
</tr>
<tr>
<td></td>
<td>c. storage cabinets</td>
<td></td>
</tr>
</tbody>
</table>

2. Now that you have identified units available, place a checkmark by those units you plan to use for storage purposes. Storage cabinets could be used; however, Evansdale is lacking in quantity.
ACTIVITY 3 (OBJECTIVE 3)

WAYS TO OBTAIN MOBILE FURNITURE
NEEDED TO ACCOMMODATE AND SUPPORT
INDIVIDUALIZED INSTRUCTION

1. Have local industrial arts or maintenance departments construct
   (see Exhibits A, B, C, D, E).

2. Purchase commercially (see list of suppliers, Exhibit F).

3. Ask others for assistance (see Consultant Services Agencies
   lists, Exhibit G).

4. Obtain from free and inexpensive sources materials for
   constructing mobile furniture (see list of sources, Exhibit F).

5. Use present furniture (see results of Mobile Furniture Survey).

Comments:

Refer to Printed Resources (Exhibit H) for additional information.
ACTIVITY 4 (OBJECTIVE 4)

POST-ASSESSMENT OF MOBILE FURNITURE

(You may use information contained in the packet or other outside sources in completing the post-assessment.)

1. List ways you have used the results of your Mobile Furniture Survey (Activity 1).
   a. Identified present mobile furniture on hand.
   b. Identified present use of mobile furniture on hand.
   c. Identified needs.
   d. Used the results in making changes in the use of the mobile furniture.
   e. Used results in the development of a plan to increase the quantity of mobile furniture.

2. List ways sectioning, displaying, and storage uses of mobile furniture have improved individualized instruction (Activity 2).
   a. Provided more areas for more activities to be going on simultaneously.
   b. Provided a more effective use of space.
   c. Identified more ways to effectively use present mobile units in individualizing instruction.
   d. Generated teacher interest in the areas of mobile furniture and underdeveloped instruction.
3. Check the mobile furniture sources which you actually used (Activity 3).

- ✓ Units built by local maintenance department
- ___ Commercial suppliers
- ___ Consultant agencies
- ___ Free and inexpensive sources
- ✓ Mobile furniture survey results

4. On the scale below, mark with a checkmark the status of the mobile furniture in the school you administer after the use of the learning packet.

[ ] Much Improvement Needed
[ ] Improvement
[ ] Little Improvement Needed
[ ] or no Improvement Needed
PLAN FOR NEXT 2 YEARS (Additions to Present Plan)

- Exit 18
- 17
- 16
- Storage 15
- Exit 14
- Exit 13
- 12
- 11
- 10
- 9
- 8

- Court Yard 19
- 20
- 21
- Exit 22

- Library 25
- 24
- 23

- Multi-Purpose

- Courtyard

- Stage Storage Equip
- Cafeteria
- Kitchen

- Exit

- Storage Office
- Exit

- Clinic
- Lounge

- 1
- 2
- 3
- 4
- 5
EXHIBIT A
Mobile Multi-Utility Cabinet

Lockable Casters
All shelves adjustable
EXHIBIT B

Mobile Divider - Open Space Program

Lockable Casters
Paint: White

Hinges
EXHIBIT C

Mobile Listening Station
EXHIBIT E

Mobile Storage and Multi-Purpose Unit
EXHIBIT F

SOURCES OF SUPPLIES

Free and Inexpensive Supplies
Furniture Stores (discarded cardboard containers)
Hardware Stores (discarded scrap materials)
Cabinet Shops (discarded scrap lumber)
Vocational Schools (free supervised student labor)
Military Surplus Outlets (inexpensive surplus)
Furniture Factory Outlets (damaged inexpensive items)

Catalog Resources
Beckley-Cardy
Brodhead-Garrett
C C M: Standard School, Inc.
Ellman's
MacMillan School Supplies
J. C. Penny Co.
Pyramid Buyer's Guide
Sears, Roebuck and Co.
EXHIBIT G
CONSULTANT AGENCIES

Representatives of furniture supply companies
State Department of Education and local school planning consultants
Architects (governmental and private)
Selected local educators
Cooperative Education Service Agency consultants
EXHIBIT H

PRINTED RESOURCES


Dean, Joan, A Place to Paint, New York: Citation Press, 1973, pp. 1-48.

Dean, Joan, Working Space, New York: Citation Press, 1973, pp. 1-47.


Modify Learning Areas
Support Individualized Instruction
A PLAN TO DEMONSTRATE HOW SCHOOL CORRIDORS
CAN BE ALTERED TO ACCOMMODATE INDIVIDUALIZED
INSTRUCTION

by

Mildred L. Walton
PURPOSE:
The purpose of this packet is to assist school administrators in:
1. Assessing corridors as learning space.
2. Preparing for the use of corridors as learning space.
3. Planning for appropriate learning activities to take place in corridor space.

CONCEPT:
Corridors make up a large portion of a school plant and with modification are available as learning space.

Sub-Concept:
Optimum use of all space, including corridors, is a basic concern of school administrators.

OBJECTIVES:
Given the necessary information, school administrators will be able to:
1. Use the instrument provided for assessing corridor space as possible learning space.
2. Demonstrate three different ways to use corridor space as learning space.
3. Demonstrate ability to improve the quality and use of corridor space through use of this packet.

4. Use the packet to accommodate and support individualized instruction. (Post-assessment)
PRE-ASSESSMENT

(Do not consult any outside sources in completing this pre-assessment.)

1. List present uses of corridors.
   a. As an access route to all parts of the building.
   b. To display student work on bulletin boards.
   c. To display art reproductions.
   d. 
   e. 

2. List ways other than the above that corridor space may be used for individualized instruction.
   a. For individual student projects.
   b. For small group projects.
   c. For learning centers.
   d. For tutorial activities.
   e. 

3. List ways that corridor space may be modified to accommodate and support individualized instruction.
   a. Organize a learning center.
   b. Carpet an area for seating.
   c. Install electrical outlets for equipment.
   d. 
   e. 


3. Facilities assessment

(check one)

A. Lighting
   Adequate ✓ Fair ___ Poor ___

B. Electrical outlets
   Adequate ✓ Fair ___ Poor ___

C. Noise factor
   Adequate ✓ Fair ___ Poor ___

D. Traffic flow
   Heavy ___ Average ___ Light ✓

E. Adjacent space use
   Classroom ✓ Cafeteria ✓
   Restroom ✓ Office ✓ Other ___

Training Activity:

Identify areas suitable for individual or small group work, tutorial areas, or display areas.

1. Carpeted area
2. Corner for desk or small table
3. Bulletin board wall
4. Learning center
ACTIVITY 1 (OBJECTIVE 1)

Corridor Survey Instrument:

1. Sketch of building. (Draw a thumbnail sketch of the building below, noting corridor space available for use as learning areas.)

2. Corridor dimensions
   A. Width 9 ft.
   B. Length 8 ft.
   C. Height 10 ft.
ACTIVITY 2 (OBJECTIVE 2)

Ways to use corridors as learning space:

1. Corridors can be used for individual or small-group learning activities. Listed below are some suggested ways to use corridor space as learning areas. Place a checkmark at the left of those suitable for activities in the building you administer.

   - A. Learning centers (see Exhibits A, B, C, D)
   - B. Learning packets (see Exhibits A, B, C, D)
   - C. Student Discussion (see Exhibit C)
   - D. Project work (see Exhibits A, B, C, D)
   - E. Other ________________________________

2. Corridors can be used for tutorial areas. (Check appropriate tutorial activities for selected space.)

   - A. Teacher-student
   - B. Paraprofessional-student
   - C. Student-student
   - D. Volunteer-student
   - E. Machine-student
   - F. Other ________________________________

3. Corridors can be used for display areas. (Check display(s) appropriate for selected space.)

   - A. Student art - flat (see Exhibit _)  
   - B. Student art - three dimensional (see Exhibit _)
   - C. Student projects (see Exhibit _)
   - D. Curriculum enrichment (see Exhibit _)
   - E. Other ________________________________
Training Activity:

Using the information above list step-by-step procedures for modifying corridor space to suit your needs.

1. Survey needs to support objectives of individualized instruction.
2. Develop plan of modifications where needed.
3. Implement plan.
4. Assess results.
ACTIVITY 3 (OBJECTIVE 3)

Ways to arrange corridors to accommodate and support individualized instruction.

1. **Learning Centers:**
   Select and set aside an area in corridor just outside classroom. A bulletin board, either portable or fixed, should be available for posting directions for that particular learning center. Such an area may accommodate an individual or a small group. (see Exhibit A)

2. **Learning Packets:**
   In a relative quiet spot near the classroom, an area can be established for the individual to work on a learning packet. (The learning packet is a highly structured outline designed to teach a concept or a skill.) (see Exhibit B)

3. **Tutorial Area:**
   An area may be utilized in a corridor for an individual or small group to work under the direction of a tutor. The work usually will be a continuation of instruction by the teacher. (see Exhibits A, B, D)

4. **Display Area:**
   Modifications may be made to a corridor in order to provide display space for artwork or student projects. Display space may be a bulletin board, a shelf, or an enclosed display area. (see Exhibit C)
Training Activity:

Place a checkmark by the activity or activities most suitable to your needs, then list equipment and materials required to modify the area to meet your needs.

✓ A. Learning centers
✓ B. Learning packets
✓ C. Tutorial area
✓ D. Display area

- Bulletin boards, chalkboards, tack boards
- Tables, chairs, desks
- Partitions, storage cabinets on casters
- Mobile furniture
Complete the post-assessment by utilizing information contained in the packet or from other available sources.

1. List ways results of corridor survey were used. (Activity 1)
   A. To modify existing space.
   B. To secure additional furniture and equipment.
   C. To enhance the individualized instruction process.
   D. 
   E. 

2. List ways corridor space was actually used.
   A. Individual students were provided space to work on projects, independently and at their own rate of speed, or with tutors.
   B. Small groups moved onto the carpet to study or read plays.
   C. Learning centers were set up for student use.
   D. Student work was displayed.
   E. 

3. List ways corridor space use has improved individualized instruction.
   A. More students are studying independently.
   B. There are greater opportunities for group interaction.
   C. It is possible to tutor individuals or small groups.
   D. 
   E. 

4. On the scale below, indicate with a checkmark where you judge the corridor space use to be at the school you administer following this learning experience.

Much Improvement Needed

Little or no Improvement Needed
WORLD FAMOUS BUILDINGS

AT THIS CENTER YOU CAN
1. MAKE A MODEL OF YOUR DREAM HOUSE
2. SET UP A DISPLAY OF BUILDING MATERIAL, SUGGEST ALL WAYS EACH COULD BE USED
3. USE BUILDING BLOCKS TO DESIGN A COMMUNITY OF THE FUTURE

EXHIBIT A
Learning Center
SHELF FOR THREE DIMENSIONAL WORK

BULLETIN BOARD FOR TWO DIMENSIONAL WORK
ALSO MAY ACCOMMODATE LEARNING CENTERS
EXHIBIT E

CONSULTANTS

Local Instruction Department
State Department of Education
Local Architects
Area Universities or Colleges
Local Educators
Interior Decorator
EXHIBIT F
SOURCE OF EQUIPMENT

Equipment on Hand
School System Supplies
Maintenance Department of School System
Local Hardware Store, Lumber Supply Stores
Vocational Schools
Military Surplus Outlets
School Equipment Firms
EXHIBIT G

PRINTED RESOURCES

Books:


