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AESTRACT

A study was devised to investigate how redia centers function within individualized instructional programs at selected elementary schools in Connecticut and to evaluate those media centers in relation to their school programs according to criteria developed by leaders in the field. Results of questionnaires showed 1) a relationship exists between the presence of a subject specialist on a school staft and the extent to which individualized instruction is used in that subject; 2) many of the schools are not using the more individualized methods for learning; 3) the selected media centers! staffing and number of activities provided usually do not meet standards; 4) there is not as wide a range of media nor as flexible circulation as is recommended; 5) budgets and services are below recommended standards; and 6) media centers are more involved in schools which have strong individualized instructional programs. Primary areas of need which were identified by the media specialists questioned included increased media collection, center expansion, and increased professional and clerical personnel. (Author/SH)



MEDIA CENTERS AND INDIVIDUALIZED INSTRUCTION PROGRAMS IN SELECTED ELEMENTARY SCHOOLS IN CONNECTICUT

A Thesis
Presented to
the Faculty of the Division of Library Science
Southern Connecticut State College

In Partial Fulfillment
of the Requirements for the Degree
of Master of Science

Thesis	Sponsor:	
	* · · · · ·	

by Andrea Stryer November, 1972

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THESIS ABSTRACT

The purpose of this study was two-fold: 1) to investigate how media centers function within individualized instructional programs at selected elementary schools in Connecticut; and 2) to evaluate those media centers in relation to their school programs according to criteria developed by leaders in the field. There has been no study which has surveyed a number of media centers functioning within various individualized instruction programs in elementary school. A search of the literature for the years 1965 to 1971 was carried out.

The limitations of this study included:

- 1. The nature of the questionnaire.
- 2. The respondents' answers.
- 3. The interpretation of the data by the writer.

The research procedures used in this study included:

- 1. Selecting the schools that
 - a) have a media center and
 - b) use individualized instruction.
- 2. Requesting the principals' permission for their schools' cooperation in the study.
- 3. Search of the literature.
- 4. Developing the questionnaire.
- 5. Pre-testing the questionnaire.
- 6. Sending the questionnaire to the selected schools.
- 7. Tabulating the data received.
- 8. Developing tables and figures.

The principal findings are as follows. There appears to be a relationship between the presence of a subject specialist on a school staff and the extent to which individualized instruction is used in that subject.



Many of the selected schools are not using the more individualized methods for learning, as in initiating and evaluating the work.

The selected media centers' staffing, number of activities provided and seating accommodation usually do not meet national standards.

There is not as wide a range of media nor is there the flexibility in the media circulation that is recommended by authorities.

The selected media centers' budgets are significantly below the recommended standards.

Media centers are involved to a much greater extent in the schools that have strong individualized instructional programs than in the other solected schools.

The services provided for students and staff in the selected centers are not as extensive as is recommended.

Almost all of the media specialists felt there were areas in which their centers could be improved. The primary areas of need were increased media collection, center expansion and increased professional and clerical personnel. However, many specialists did not seek changes that would bring their centers up to national standards.

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CHAPTER I

THE PROPLEM AND DEFINITIONS OF TERMS USED

Shortly after World War II, many new concepts were articulated in the field of education. The more advanced thinking began emphasizing the importance of the individual taking more responsibility for his own learning. An outgrowth of this thinking has been individualized instruction.

Parallel to the development of individualized instruction has been the vast technological expansion. This advance brought many new vehicles for learning; opening new ways for the learner to teach himself. Many of these vehicles have been incorporated in the school, expanding the library into a library media center.

Only recently have these two developments been utilized in elementary schools. With greater emphasis on the individual and the increase in types of media available, the role of the media center has changed from that of the traditional school library to one of complete involvement in the school's educational program.

· I. THE PROBLEM

Statement of the problem. The purpose of this thesis is twofold: 1) to investigate how the media center functions within individualized instructional programs at selected elementary schools in
Connecticut; and 2) to evaluate these media center programs based on
the opinions of leaders in the field.

Importance of the study. Many studies have been done on the



development of individualized instruction programs and media centers separately. There has been no study, however, which has surveyed a number of media centers functioning within various individualized instruction programs in elementary schools. In the opinion of the writer, therefore, a need exists for such a study.

Delimitations of the study. Search of the literature in the library science and education fields through Library Literature, leducation Index, Dissertation Abstracts, Complete Guide and Index to ERIC Reports, and Current Index to Journals in Education, covers the period from 1966 through 1971. The writer felt that literature prior to 1966 would have little relevance to the study because few schools had introduced individualized instruction or developed media centers before that time.

The study was delimited to schools selected by the writer from two lists compiled by the Eureau of Elementary and Secondary Education of the Connecticut State Department of Education. The questionnaire devised by the writer, its interpretation by the media specialist to whom it was sent, and the writer's interpretation of the responses further restricted the study.



^{1.} Library Literature (New York: H. W. Wilson Co., 1921 -).

^{2.} Education Index (New York: H. W. Wilson Co., 1929 -).

^{3. &}lt;u>Dissertation Abstracts</u> (Ann Arbor, Michigan: University Microfilms, 1938 -).

^{4.} Research in Education (Washington, D.C.: United States Government Printing Office, 1967 -).

^{5.} Current Index to Journals in Education (New York: CCM Information Corporation, 1969).

II. DEFINITIONS OF TERMS USED

The following definitions are to be found in <u>Standards for</u>
<u>School Media Programs</u>:

Media center. A learning center in a school where a full range of print and audiovisual media, necessary equipment, and services from media specialists are accessible to students.

Media specialist (librarian). An individual who has broad professional preparation in educational media.

Media aide (clerk). A media staff member with clerical or secretarial competencies.

The definitions below are according to Deighton's The Encyclopedia of Education: 7

Individualized instruction. A program in which the teaching is adapted to the student's background, ability, performance, and interests. It includes ways in which students are grouped and regrouped, the way time is allocated for various types of staff and student activities, the way the staff is organized for more efficient utilization of the individual talents of its members and the way the curriculum is.

Independent study. Individualized learning activities proposed



^{6.} Standards for School Media Programs (Chicago and Washington, D.C.: American Library Association and the National Education Association, 1969).

^{7.} Lee C. Deighton. (ed.), The Encyclopedia of Education (New York: Macmillan, 1971).

or elected by the learner and, at least in part, planned and evaluated by the learner.

Team teaching. A way of reorganizing the staff so that the talents of each member can be most efficiently utilized....

Flexible scheduling. A way of decentralizing the control time so that individual differences among learners can be accommodated in the daily schedule.

Erown, in his book, The Nongraded High School, 8 provides the following definition:

Non-graded curriculum. 'arrangements for the individual student to pursue any course in which he is interested, and has the ability to achieve without regard either to grade level or sequence.'

The following is defined in Ebel's Encyclopedia of Education Research: 9

Programmed Learning (programmed instruction). is self-instructional, focusing the student's attention on a limited amount of material at one time; it requires a response to each segment of material; and it gives the student immediate knowledge of the results after each response.

Edling defines the following in <u>Individualized Instruction Case</u>
Studies: 10



^{8.} Bartley Frank Brown, The Nongraded High School (Englewood Cliffs, N.J.: Prentice-Hall, 1963). Cited in Deighton, op. cit.

^{9.} Robert L. Ebel (ed.), Encyclopedia of Education Research (New York: Macmillan, 1969).

^{10.} Jack Edling, <u>Individualized Instruction Case Studies</u> (Stanford: Institute for Communication Research, n.d.).

Individually prescribed instruction. An educational process tailored to each student's individual needs and abilities...involving diagnosis, written prescription and continual evaluation with carefully sequenced and detailed listing of instructional objectives.

III. ORGANIZATION OF REMAINDER OF THE THESIS

Chapter II reviews the literature from 1966 to 1971 concerning individualized instruction and media centers. Chapter III describes the population and procedures used. Chapter IV reports on data culled from the returned questionnaires. Chapter V analyzes and evaluates the data and Chapter VI includes the summary, conclusions, and recommendations of the study.

CHAPTER II

REVIEW OF THE LITERATURE

It is only within the past ten years that the individualized philosophy and the media center philosophy have been expounded in concrete terms. Few schools had begun to put either concept into practice until about five years ago. It is for this reason that the literature reviewed has been limited, with several notable exceptions, to the years 1966 to 1971.

In order to understand both of these movements, it is necessary to acquire background on the contemporary goals and changes in education. This chapter's selected review of the literature will include background material on educational goals and changes; individualized instruction, its aims and means; the media center's components; the media center's program; and the media center's involvement in individualized instruction.

Background

Nearly a half century ago educators began to advocate individualized education for young learners. Carleton Washburne, in 1928, said that from the standpoint of what our schools might give to insure each child's full development, most schools have failed, because they have not given each child the opportunity to develop to his own capacity. This statement could have been made more recently, as



^{1.} Carleton Washburne, and Myron M. Stearns, <u>Better Schools</u> (New York, John Day Co., 1928).

indicated by a great number of recent writings.

A number of people have emphasized different aspects of our national educational goals but they all point in the same direction - towards individualizing instruction and the use of different media.

John Gardner, in his <u>Pursuit of Excellence and the Future of America</u>, says,²

If we are really serious about equality of opportunity, we shall be serious about individual differences, because what constitutes opportunity for one man is a stone wall for the next. If we are to do justice to the individual we must seek for him the level and kind of education which will open his eyes, stimulate his mind and unlock his potentialities. We should seek to develop many educational patterns - each geared to the particular capacities of the student for whom it is designed.

But though the educational pattern may differ, the goals remain the same for all: enabling each young person to go as far as his aptitude will permit in fundamental knowledge and skills, and motivating him to continue his own self-development to the full along similar lines.

Havighurst³ finds two principles underlying today's curricular changes: 1) students can enjoy learning and can develop a desire to learn for the sake of learning; and 2) the human mind should not be a storehouse for knowledge, but an instrument for learning.

Three factors which Ellsworth Mason pinpoints are 1) the multiplicity of subjects; 2) the blurring of subjects (they overlap



^{2.} John Gardner, <u>Pursuit of Excellence and the Future of America</u> (Garden City, N.Y.: Doubleday, 1959) p. 32, cited by Ruth Ann Davies, <u>The School Library</u> (New York: Bowker, 1969) p. 256.

^{3.} Robert J. Havighurst., "Educational Changes and their Implications for the Library," ALA Bulletin, 61:537, May 1967.

^{4.} Ellsworth Mason. "Contemporary Education: A Double View," School Library Journal, 16:36, November, 1969.

and "become increasingly interdependent in their basic concepts, methodology and subjects of concern."); and 3) the blight of learning - it is a grind now and we should be returning the enjoyment to the learning process.

The above are expressions of the reasons underlying the great changes in educational programs today.

Individualized Instruction

Aims. Individualized instruction (or education) as the term is used today "refers to any of the procedures used to ensure that the individual student receives instruction that is specifically appropriate for him. A general definition is this: <u>Individualized education consists of planning and conducting</u>, with each student, general programs of study and day-to-day lessons that are tailor-made to suit his learning needs and characteristics as a learner."

Jack Edling has done extensive research and writing on individualized instruction. In a project supported by the Research and Utilization Branch of the U.S. Office of Education, a number of programs were observed. The Phase 1 report gives the statistics and the questions and responses of the original group of 600 schools, Edling's



^{5.} Glen Heathers, "A Definition of Individualized Education," Paper presented at 1971 American Educational Research Association annual meeting.

^{6.} Jack Edling and James Buck, "An Interpretive Study of Individualized Instruction Programs", (Monmouth, Ore.: Oregon State System of Higher Education, 1969).

research yielded a manual for administrators, 7 a series of pamphlets, 8 and a journal article. 9 The manual presents the theory behind individualized instruction. Edling states that individualized instruction is oriented toward the child. Four basic types of individualized instruction are distinguished which he charts thus:

	School Determined		Learner Selected	
System Determined	A.	Individually Diag- nosed & Prescribed	c.	Personalized
Learner Selected	В.	Self-Directed	D.	Independent Study

After giving the background, Edling 10 presents details on diagnostic, instructional, and evaluation procedures, reporting student progress, evidence of the effects of individualized instruction, problems encountered, and recommendations on aplementation procedures. The series of pamphlets give further details. The journal article gives an overview of the theory and some of the types of individualized instruction used by the particular schools in Edling's study.



^{7.} Jack Edling, <u>Individualized Instruction-A Manual for Administrators</u>, (Corvallis, Ore.: Oregon State University, 1971).

^{8.} Jack Edling, Individualized Instruction Project Materials-Case Studies, (Stanford, California: Institute for Communication Research, n.d.).

^{9.} Jack Edling, "Individualized Instruction-the Way It Is - 1970" Audiovisual Instruction, 15:13, February, 1970.

^{10.} Jack Edling, <u>Individualized Instruction-A Manual for Administrators</u>.

William Hedges, in an article entitled "What is Individualized Instruction," sets out eight factors which, he says, must be accepted by schools undertaking individualized instruction. The eight factors are 1) students do not leave a unit and begin a new one until they have reached a predetermined level of proficiency; 2) students must be allowed varying amounts of time and practice for the specific goals; 3) there must be frequent evaluation of student's progress; 4) the teacher's role is to diagnose pupil needs, plan and prepare each child's instructional program and work with pupils in small groups or individually; 5) students assume more responsibility for their own development; 6) almost every child becomes a teacher part-time; 7) the classrooms are arranged differently; 8) the systems analysis' approach is applied to schools as learning centers.

The aims, then, of individualized instruction are individualand learner-oriented rather than group- and teacher-oriented. The attainment of these aims has given rise to various means.

Means. Individualized instruction takes a number of forms.

Each form involves reorganizing the school, classroom, the curriculum and/or the instructional procedures.

Bicknell and others 12 discuss individualized instruction, emphasizing the importance of selection of appropriate instructional



^{11.} William Hedges, "What is Individualized Instruction," Hedges Letter Number One, Individualized Instruction p. 1-4. Science Research Associates, 1967. Reprinted in Hillson & Hyman, Change and Innovation in Elementary and Secondary Organization, (New York: Holt, Rinehart, 1971).

^{12.} John E. Bicknell & Others, Summer Workshop in Individualization of Instruction, Selected Papers, (Fredonia, N.Y.: State University College, 1970).

objectives, educational experiences, instructional techniques and study materials for each pupil. In addition, there must be continuous assessment of pupils. Included in these selected papers are articles on the major efforts in the field, such as: team teaching and IPI (individually prescribed instruction).

An early paper called "Team Teaching in the Elementary School" has a discussion of the development of the team concept at the Franklin School Project. Groups of teachers took joint responsibility for the instruction of a portion of the school population. With more collaboration between the teachers, there was room for specialization. In the area of curriculum development, there was opportunity for more reflective and creative work.

Individually prescribed instruction, according to John O. Bolvin in the sequential behavioral objectives; 2) have a means of diagnosis of student achievement in terms of the curricular objectives as well as the proficiency level desired for each student; 3) provide a variety of paths for attaining mastery of any given objective; 4) prescribe the learning tasks which the student is ready for; 5) organize the whole school to facilitate individualization; and 6) have strategies for evaluation and feedback of information for teachers as well as curriculum developers.



^{13.} Robert Anderson, Ellis A. Hagstrom & Wade M. Robinson, "Team Teaching in an Elementary School," School Review 68:71 1960. Reprinted in Hillson & Hyman, p. 111-121.

^{14.} John O. Bolvin, "Individually Prescribed Instruction," Educational Screen & AV Guide 47:14, April 1968. Reprinted in Hillson & Hyman, pp. 241-245.

Maurie Hillson 15 in discussing the non-graded school (he prefers the term - continuous progress) states that the progress organization for the pupils must be appropriate to the rate and pace of learning as well as to other factors in learning ability. The curriculum must be open-ended, well-planned and sequentially organized. It must reflect the idea that, irrespective of age or years in school, each person can learn all that he is capable of learning. There are no grade levels through which one is promoted. The learner moves at his own rate.

One school that uses contract learning is the L. E. Berger Middle School in North Dakota. ¹⁶ A contract is prepared with the concept to be learned identified and the behavioral objectives clearly stated. Alternative instructional procedures forteaching the objectives are spelled out. The student is evaluated in terms of the behavior stated in the objective. The student and the teacher then examine the evaluation together. The contracts allow the student self-pacing and self-direction.

Background in the area of independent study is given in a book by B. Frank Brown. 17 He calls independent study one of the most effective ways to draw from the student his desires, objectives, and participation. Although largely confined to the graduate school, it now has begun seeping downward. He feels that its growth has been



^{15.} Maurie Hillson, "Continuous Progress Education," from A Report of an Invitational Conference on Continuous Progress sponsored by The Eritish Columbia Teacher's Federation, February 24-17, 1967. Reprinted in Hillson & Hyman, pp. 59-67.

^{16.} Jack Edling, Individualized Instruction - Case Studies. #23.

^{17.} B. Frank Brown, Education by Appointment, Hew Approaches to Independent Study, (W. Nyack, New York: Parker Publ. Co., 1968).

slowed down by linking it with team teaching and modular scheduling. Independent study must be a rigorous learning activity. It shifts to the individual the burden of his own education, of developing how to learn. Brown goes into some details of specific programs. He discusses some of the ideal space arrangements and needs for independent study to take place.

Another discussion of this topic is found in an article by

Anne Patrick. The team teaching movement, she says, awakened interest in independent study in the elementary school. Independent study is concerned with a method for children's procedures and involvement in the learning process. Its concern is for the particular educational development of each individual. Its major objective is to bring the individual to a mastery of himself. The process of inquiry is more important than the specific information assimilated. The teacher is the guide, the listener. Patrick gives examples of programs in Illinois, Ohio and Utah.

A discussion of programmed learning is by Paul Saettler. 19
The historical background of programmed instruction is given, with a detailed account of the Denver Public Schools' use of it. It was difficult and time-consuming. He discusses other uses in the schools and the disagreements going on in the field. It is becoming more than



^{18.} Anne Patrick, "Practices and Programs for Elementary Schools," in <u>Independent Study</u> Bold New Venture, Ed. by David w. Beggs & Edward G. Euffie, (Bloomington: Indiana University Press, 1965). pp. 68-82.

^{19.} Paul Saettler, "The Rise of Programmed Instruction" from A History of Instructional Technology by P. Saettler (New York: McGraw-Hill, 1968) pp.250-267. Reprinted in Hillson & Hyman p.305-323.

simply auto-instruction. He concludes that programmed instruction"....
will extend to a cybernetic analysis of the learner as a feedback
system in the context of his interactions with his total environment."

An example of a school using student tutors is the Pacoima Elementary School in Pacoima, California. Older pupils assist kindergartners in learning specific skills. They tutor for the specific objectives on a one-to-one basis. The teacher works first with the tutors, and is then free to spend more time with the individual learners.

One way of determining how individualized a program is may be with this characterization formulated in the report put out by the Educational Resources Information Center on individualized instruction. The following procedures: 1) the learning activities which can be described by a) teacher's direction, b) carefully sequenced and prepared materials, or c) selection of activities by the student; 2) the setting of the learning activities which can take place in a) the classroom or b) the learning resources area; and 3) the forms of scheduling time which can be a) complete scheduling, b) large blocks of time or c) unscheduled.

The Media Center - Its Components

"One of the by-products of the communication revolution has been its influence upon our schools and upon our understanding of the



^{20.} Jack Edling, Individualized Instruction - Case Studies. #4.

^{21.} Individualized Instruction, Putting Research into Practice (PREP), Department of Health, Education & Welfare, Brief #16, n.d.

learning process." This statement is made by Alice Lohrer 22 in introducing the changes that have taken place in the school library. She says that the school library's role has been changing "...until now it has developed into a service agency providing the tools of learning in a well-organized fashion, with professional staff participating actively in the teaching process and clerical staff handling routines associated with book and non-book materials." Miss Lohrer studied school library programs which actually functioned as media centers ("instructional materials center," "learning center," and "instructional media center" and other terms used). The study gives data on many components and characteristics of school libraries. Grade levels, enrollment, quantitative standards, special materials, quarters, resources, administrative practices, the staff and their competencies, and the budget are some aspects which determine how effectively the programs functioned as media centers.

The guidelines for the Lohrer study, begun in the early 1960's were articulated in the 1960 Standards²³ (discussed later in this chapter). Today, papers refer to the 1969 Standards for School Media Programs.²⁴ This work gives actual numbers for the size of the staff, the square footage, the expenditure, amount and type of materials and



^{22.} Alice Lohrer, The Identification and Role of School Libraries that Function as It Cs and Implications for Library Education in the U.S. (Urbana: University of Illinois, 1970).

^{23.} Standards for School Library Programs, (Chicago: American Library Association, 1960).

^{24.} Standards for School Media Programs, (Chicago & Washington, D.C.: American Library Association and the National Education Association, 1969).

equipment needed for a basic program as well as numbers for more advanced programs.

Media Center Activities

A little more than a decade ago, school libraries began serving as centers for instructional materials. The prime mover was the Standards for School Library Programs of 1960, according to the Knapp Study. This work spelled out the philosophic objectives of a school library as a media center and gave actual numbers for books, other media and the size of staff which would adequately further these objectives.

Having stated the need for these resources, the 1960 Standards proceeded to discuss the functional programs. The school library is one of the basic requirements for quality education, it stated. "The most important part of the library program is the work with students and teachers, those activities and services that make the library an educational force in the school." 26

Richard Darling, in his "IEC-Library Services," 27 states that the IEC's aim is total service. It should act as a collection of materials as well as a center serving the curriculum and part of the instructional program. The library should become the focal point of the instructional program. The librarian must work with the teacher throughout the instructional program, must be involved in curriculum



^{25.} Peggy Sullivan (Ed.), Realization: the final report of the Knapp School Libraries Project, (American Library Association, 1968).

^{26. 1960} Standards, p.7.

^{27.} Richard Darling, "IMC-Library Services," <u>Instructor</u> 77:84, November, 1967.

planning, select materials for teaching; and construct multi-level bibliographies. Important to this is a knowledge of the courses in order for the librarian to become the coordinator of materials. Also, the librarian should stress library skills related to the unit and should help in research skills.

There are several discussions of what a good media center should provide for its school.

The book by Ruth Ann Davies states over and over again that the school library "...becomes a force for educational excellence when it functions as an integral supporting component of the total educational program." The educational and library programs are interdependent; the educational program gives purpose, direction and significance to the library program, for its philosophy, goals and objectives ARE those of the library.

Davies provides this view in the following statement:

The library program that is educationally effective functions as a multi-media learning laboratory. The librarian charged with the responsibility of administering the multi-media learning laboratory must respect media not as things but as ideas. Because library resources are ideas, the librarian must include in the library collection all types and kinds of authentic carriers of appropriate information regardless of format. The librarian must systematically and scientifically build the library's media collection to match the school's curricular support needs and the student's personal and educational needs. The librarian must plan cooperatively with fellow teachers for the purposeful, timely, significant, and appropriate use of media in support of the teaching-learning endeavor. He is in function a media programming engineer. He couples his knowledge of curriculum and of materials with his knowledge of individual student needs, interests, goals, abilities, and progress rate. Through his specialized professional



^{28.} Ruth Ann Davies, The School Library - A Force for Educational Excellence (New York: Bowker, 1969) p.3.

competence to use learning resources as teaching tools, the librarian must structure a scientific plan for the most effective and efficient use of these resources.

Such a library program promoted by such a librarian is not the result of accident or chance; it is an educational necessity forced upon the modern scene by the demands of modern innovative educational programs designed to carry learning for each student beyond rote memory to functional literacy.²⁹

Instruction and Guidance for the Student. The Standards 30 say that the media program should provide instruction in the use of the media center that is correlated with the curriculum and is educationally sound. Most of the instruction should be done with the individual in the media center, but some can be presented by either the teacher or media specialist in the center or in the classroom, with the size of the group determined by learning needs.

With the expansion of school libraries into IMCs and students using cross-media approaches, Frances Henne says that the librarian must do more than showing how to use a filmstrip viewer. Teaching the use of the library resources must include guidance in viewing and listening skills. Library and media skills, as well as study skills, should be taught when their mastery is related to personal or class use. It is in this way that the skill becomes meaningful to the learner.

...the librarian's responsibilities and opportunities for observing and helping students in the use of materials (and in the process, evaluating their competencies) are clearly indicated. The school librarian's role in the program of study skills and methods of inquiry is that of a teacher and guidance specialist. The librarian's follow-up services in seeing how



^{29.} Davies, p.95.

^{30. 1969} Standards, p.4.

effectively students are using the library materials they have selected for their immediate needs are strategic and valuable. 31

Henne emphasizes that the important things are what the students do with the materials (such as the evaluation, synthesis, thought and appreciation) not the searching, locating and assembly of them.

Davies, agreeing with Henne, feels that all study skills are the responsibility of <u>all</u> who teach and should be an integral part of the planned teaching and learning program.

Services for the Faculty. while some media specialists are oriented toward helping with student skills, others emphasize helping teachers to clarify the objectives of student performance, to develop the means of reaching these objectives and to evaluate the results. The Standards³² continue, however, that all media programs for the faculty should provide information about new materials; make the materials easily accessible; produce needed materials; keep teachers informed about recent educational developments; relate information regarding students' progress; provide in-service courses; and assist in the analysis of instructional needs and the design of learning activities.

The effectiveness of the program depends, too, upon the support of the school principal and the cooperation between the teachers and the media specialist.

Materials - Selection, Accessibility, and Preparation. The Standards say that meeting "...standards for the selection of materials and



^{31.} Frances Henne, "School Libraries," American Association of School Libraries 15:15, May, 1966. Reprinted in Davies, pp. 362-3.

^{32. 1969} Standards, p.4.

making the resources of teaching and learning easily accessible are necessary for the provision of materials of good quality and optimum use of these materials by teachers, students, and the staff of the media center..."33

The materials must be selected to meet the requirements of the various areas of the curriculum and to provide for the diverse learning skills and interests of the students. The selection must reflect current trends in education and communication. And finally, the materials selected must be carefully evaluated for quality.

Davies 34 discusses the role of the librarian as a materials specialist. The resources, she emphasizes, should be used, not as 'things' but as 'ideas'. The aids and materials must be used not only because they are interesting, but because they explain or clarify a needed understanding. The material must be chosen in terms of the pupil's maturity and experience and in accordance with individual differences. The librarian must know when and how to best use the content.

The materials (and the center's services, as well) must be made readily available whenever needed by students and teachers.

Full accessibility entails not only the availability of a collection of materials that meets standards for variety, breadth and scope, but also the provision of duplicate titles to meet curricular requirements as well as requests of students for popular materials that are not necessarily related to class work. Media equipment in sufficient amount must be available to assure maximum accessibility and use of materials by groups and individuals.



^{33. 1969} Standards, p.19

^{34.} Davies, p.3.

^{35. 1969} Standards, p.23.

The <u>Standards</u> continue that the circulation and loan regulations should allow students and teachers to obtain materials easily for use in school and at home. "Only in very exceptional cases should materials be barred from loan outside the media center." As equipment becomes more portable, students should be able to borrow it, too.

As far as material preparation, each media program should be able to provide services for graphics production and display (e.g. producing transparencies, making charts and graphs, and making slides) and photographic production.

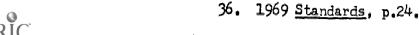
Discussion of the Media Program's Role with Faculty and Materials. In Realization, the final report of the Knapp School Library Project, there is a resume of the interrelationships between the media specialist (or librarian), the faculty, the administration, the students, and the materials. In relation to the Central Park Road School, Miss Grieco, the consultant for the Project, said:

First, the working relationship between the librarian and teachers is of paramount importance in the development of full programs of school library services.

Teachers and administration are so rarely trained to know and use the full resources of either the library collections or the professional librarian that it becomes the responsibility of the librarian to be aware of the ever present opportunities in the classrooms which can 'ead to more effective use of the library's materials and the librarian's talents, which, in turn, can lead to increased and informed demand.

Second, the selection and acquisition of quality multi-media materials are the necessary foundation for a good instructional materials center. However, maximum and optimum use of a cross-media approach to learning often depends on insightful evaluation and analyses of both the medium and the message to furnish clues for both constructive and creative use.

Third. the analysis of basic techniques in each medium provides aspects of study which are often appropriate and sometimes





essential to the fullest understanding of the materials. Fourth, it is axicmatic that the librarian should be the liaison between books and readers, between films and viewers, between all kinds of materials and all kinds of learners; that he must know the tools and techniques in the selection and evaluation of print and non-print materials; that he must be abundantly aware of the best approaches to teaching and learning. What is not always so obvious is that the librarian is in a natural position to act as a liaison between teachers and pupils, pupils and pupils, and teachers and teachers. The librarian can cross-fertilize many teaching and learning experiences in a 'full program of school library services'..."37

Scheduling. "Individuals or small groups of children in elementary schools should have access to the media center at all times during the school day. The use of a rigid schedule for class visits to the center is not recommended." 38

Media Center's Involvement in Individualized Instruction

The majority of articles on media centers and individualized instruction programs are about how a particular center works in a specific school or school system. The following articles were selected either because they generalize from the specific or because they discuss the media center as it should ideally function.

The effective media " '...is the school's nerve center or instructional rescurce area, where a teacher can send a student, unsupervised, at any time, for any purpose.' It will be the school's service center for teachers and students to facilitate the teaching-learning process." Mesedahl goes on to say that independent study requires an area with easy access to available materials, equipment



^{37.} Sullivan, Realization p.57-59.

^{38. 1969} Standards, p.24.

^{39.} Leroy K. Mesedahl, "IMC; Contribution to Individualized Instruction," Audiovisual Instruction 10:704, November 1965.

and staff. Mesedahl speaks of the importance of the IMC in specific terms in two Duluth elementary schools.

An early article by Brick ties the learning center very closely to individualized instruction. In "Learning Centers: the Key to Personalized Instruction." he discusses first the arrangements in the Fountain Valley School District in California. The learning center is the extension of the regular classroom. Within clusters, the educational process is personalized through pupil placement, academic diagnosis, prescription, and continuous evaluation. Providing for individualized instruction means that the students must be matched with the necessary and appropriate materials, concepts and people. The students have many self-directed activities.

The learning center is the resource center for diagnostic materials, electronic devices, tape banks, test banks, science banks, use and storage of audiovisual equipment. The learning center is also a teaching center supervised by a coordinating teacher who conducts individual, small group and cooperative teaching programs. The coordinating teacher is the one to fill the classroom teacher's prescription.

Frances Hatfield edited "Member of the Team" which is composed of a series of articles about the madia centers in individualized instruction in Broward County, Florica. The media centers



^{40.} E. Michael Brick, "Learning Centers: the Key to Personalized Instruction," Audiovisual Instruction 12:8, October 1967.

^{41.} Frances Hatfield (ed.), "Member of the Team," <u>Instructor</u> 80:51, February 1970.

were planned as open areas with the emphasis on media being available in a flexible program. The space was planned with a thorough knowledge of the educational objectives, specifications, programs and trends in mind and designed for individualized learning techniques. Key to planned and proper use of the multi-media is accessibility of equipment and materials. The media specialist's goal is to involve the student actively and provide opportunities for growth in independent work. The services of the media specialist should include 1) conferring with the teachers about planned activities, 2) advising teachers of new materials, 3) helping in the use of audiovisual equipment, 4) suggesting ways of supplementing the curriculum, 5) instructing students in the use and skills of the media center. The articles stress that the personnel are the key to successful individualized programs.

In a recent article, Brick discusses the flexible scheduling and the important period, one afternoon each week, that is used for planning use of the learning center, media and equipment. This time is also used to discuss the improvement of teaching techniques and upto-date pupil profiles.

An even more up-to-date article is by Leslie Gottardi entitled "Instructional Media Center Services in the Nongraded Elementary School." The key word is service, says Gottardi. Teaching can be made more effective through the use of teaching materials and the most recent techniques. The IMC has several functions. Function 1: It must



^{42.} E. Michael Brick, "Magic Doors to the Enchanted Land," Educational Screen and AV Guide 50:10, January 1971.

^{43.} Leslie Gottardi, "Instructional Media Center Services in the Non-graded Elementary School," <u>Audiovisual Instruction</u> 16:30, April 1971.

place the necessary materials and services at the disposal of teachers and pupils at the most valuable time. The advent of independent study has created a need for a more effective study center than traditionally has been the case. Thus, function 2 is to train students to handle increasing amounts of unscheduled class time that develops as a result of independent study. Function 3, the most important one, is that the IEC supports the curriculum by providing instructional materials for a wide range of pupil experiences based on individual differences and learning rates.

The librarian, Gottardi says, wears three hats: the first is as master teacher; the second as materials specialist; and the third as media programming engineer, which necessitates a systematic study of curriculum guides, learning tasks and student abilities.

Seven tasks are enumerated for the effective librarian: 1) to clarify the objectives of each unit of study with the teacher; 2) to give an overview of materials available for teacher and student; 3) to provide a bibliography of materials with different ability levels; 4) to explain and demonstrate to teachers the instructional characteristics of selected materials; 5) to provide time to work with students and teachers on equipment utilization; 6) to evaluate the suitability and adequacy of materials made at the end of each unit; and 7) to provide the absolutely essential flexible schedule.

Rita Dunn's article discusses an individualized instruction system in West Hartford, Connecticut. She says, "Within one decade the role of media has changed from that of a supplement to the primary surce to instruction.... The process of providing multiple media resources which can present information through a variety of perceptual



avenues makes an individualized course of study possible for every student in our school."

Through individualization, the media specialist "...will be the diagnostician of curriculum, a prescriber of resources and a guide to the effective use of technology." The media specialist will be responsible for 1) diagnosis of perceptual strengths through the use of media as testing devices; 2) curriculum suggestions on the basis of available materials and students' perceptual diagnosis; 3) supervision of student learning in the media center; 4) cooperative planning with teachers; and 5) serving as resource person for enrichment programs. There will have to be a great deal of interaction between the media specialist and the teacher in cooperatively designing the prescription for each learner. After the objectives have been determined, the media specialist will gather material relevant to those objectives, the level of the student's comprehension, his major interests and his learning style. Thus, the media specialist's role will complement the teacher's changing role.

Summary

In this period of history, one of education's major aims is, not simply to reach 'the average;' but to communicate with the individual. It is this aim which has been behind the efforts of the last decade to institute in our schools ways of developing the potentialities of each individual. This aim has been behind the many forms of



^{44.} Rita Dunn, "Individualizing Instruction-Teaming Teachers & Media Specialists to Meet Individual Needs," <u>Audiovisual Instruction</u> 16:27, May 1971.

^{45.} Dunn, p.28.

individualized instruction, as well as the growth of the media center.



CHAPTER III

POPULATION AND PROCEDURES

I. POPULATION

The purpose of this study is to investigate how the media center functions within individualized instructional programs. It was necessary, therefore, to select those schools which had both media centers and individualized instructional programs.

The populations used for the study were public elementary schools of selected towns in Connecticut. Using <u>Indiv Instruction</u> Elem and <u>Library Teachers--Elementary Schools</u>, a study was undertaken to determine which schools met the requirements for inclusion in the study.

Criteria for Selection

In December, 1971, two lists were acquired from the Eureau of Elementary and Secondary Education of the Connecticut State Department of Education. The former list was compiled in 1969. According to Mr. Michael Tobin, Consultant in Elementary Education in the State Department of Education, it was the most recent compilation of schools with individualized instructional programs. The second list was that



^{1.} Indiv Instruction Elem (Hartford: Connecticut State Department of Education, 1969).

^{2. &}lt;u>Library Teachers--Elementary Schools</u> (Hartford: Connecticut State Department of Education, 1970).

^{3.} Indiv Instruction Elem, op. cit.

of elementary school library teachers compiled in 1970. The 1971 list had not been completed, according to Miss Rheta Clark's office in the Division of Library Services of the State Department of Education. There is no separate list of those schools with media specialists, since the term "media specialist" is not used officially by the Connecticut State Department of Education. Therefore, the schools with personnel heading school libraries as well as those heading media centers appear on the same list.

For inclusion in the population, a school had to have 1) an educational program which involved some use of individualized instruction; and 2) a media center directed by professional personnel. Schools appearing on both lists noted above were initially selected. Seventy-seven schools were considered for study. Eleven more schools, known to Miss Patricia Jensen, Assistant Professor of Library Science at Southern Connecticut State College, were added to the original list. The final list, then, contained the names of eighty-eight schools.

Final Selection

In order to determine whether the pre-selected schools indeed had individualized instructional programs and media centers, letters were sent to the principals of the eighty-eight elementary schools stating the nature of the study and asking for the principal's permission for the school to be used in the study (see Exhibit 1, Appendix A). Enclosed with each letter was a reply postcard (see Exhibit 2, Appendix A). Of the sixty-seven (77%) replies, sixty-four principals gave their permission for the questionnaire to be sent to



^{4.} Library Teachers -- Elementary Schools, op. cit.

their schools' media specialist. The three principals who did not grant permission stated that their schools had no media centers.

It was assumed by the writer, then, that the elementary schools whose principals had granted permission met the criteria for selection:

1) an individualized instructional program; and 2) a media center. It was this group of sixty-four schools that became the population for study.

II. PROCEDURE

Upon final selection of the schools to be studied, a search of the literature was made for information about individualized instruction, its aims and means; the media center, its components and its program; and the interrelationship between the individualized instructional programs and the media centers.

A questionnaire was developed by the writer using information culled from the professional literature. The purpose of the question-naire was to obtain data concerning the activities of the media centers in schools with individualized instructional programs. Specifically, it was to learn 1) what types of individualized instructional programs are used in the schools and in the media centers; 2) who are the active participants in terms of staff and students; and 3) what media center materials, facilities, and services are available to the students and staff. Questions were developed within three basic categories: 1) the school and its program; 2) the media center; and 3) the use of the media center by staff and students.

Questions in the first category sought to obtain statistics and needed information about the school and its program: 1) number of students, range of grades, number of professional staff, and number and



type of specialists and consultants assigned to the school; and 2) the type of individualized instructional programs being used by the school and the means by which this instruction is implemented.

The secondary category of questions was centered on the physical aspects of the media center: 1) the number of students and activities that the center can accommodate; 2) the number and type of personnel on the staff; 3) types and use of materials and equipment; and 4) the operating budget of the center. The questionnaire did not attempt to obtain the quantity of materials or the scope and depth of subject matter coverage. The more advanced type of materials, such as remote access and videotape, also was not included in the survey.

The final category included questions on the use of the media center: 1) types of activities occurring in the center; 2) kinds of services offered to students and staff; 3) degree of involvement in the school's individualized instructional program; and, finally, 4) necessary changes to bring about greater involvement.

After numerous drafts and helpful comments from professional educators and media specialists, the questionnaire was sent to several elementary school media specialists for pre-testing. Following consideration of their comments, the final draft was completed (see Exhibit 3, Appendix B). On the 18th of March, a questionnaire was sent to each media specialist in the sixty-four schools selected for study, with an accompanying letter and a sheet of definitions (see Exhibit 4 and 5, Appendix B). Thirty-eight (59%) responses were received from the initial mailing. On April 28th, a second copy of the questionnaire and another letter (see Exhibit 6, Appendix B) were sent to the twenty-six (41%) who had not responded. The second mailing resulted



in receipt of an additional thirteen (20%) responses.

A total of fifty-one (80%) responses were received by the writer. Of these, four could not be used in the study: two did not have individualized instructional programs; and two did not have media centers combining the book and audio-visual media. Forty-seven (73%) of the sixty-four schools selected were used in the final collection of data for the study.

Upon receipt of the completed questionnaires, individual answers were recorded and additional comments noted on tally sheets. Tables were developed for the purpose of tabulation and to provide quicker study of the data culled from the 351 possible responses. Total number of responses for each category on the tables were converted to percentage equivalents for purposes of comparison. Percentages did not always total a precise 100% because: 1) not all questions were answered by each respondent; and 2) some questions allowed for more than one response. The percentages, however, were based on the denominator forty-seven, the number of questionnaires used in the data collection, whether or not a question was answered by all of those responding. It was assumed by the writer that, if an answer was not checked, the respondee could not provide the particular information cited on the form. The only exception to this was the response for a school budget which included only the periodical allocation. This budget, therefore, was not included in any of the budget tables. Percentages were recorded on a questionnaire for the final tabulation (see Exhibit 7. Appendix C).

The one component which could not be computed in percentages was that of the media center budgets. The schools selected do not use



similar systems for budgeting materials and equipment which, therefore, required a manner of tabulation different from that noted above. The budgets, then, were grouped and tabulated by the manner in which the expenditures were allocated: 1) five areas of expenditure: books, reference, periodicals, a-v equipment, and a-v materials; 2) four areas: books with reference, periodicals, a-v equipment, and a-v materials; 3) print media, a-v equipment, and a-v materials; 4) various other combinations of budget categories not falling in the above groups; and 5) the group which presented a single sum. Too few budgets fell into categories 4 and 5 to warrant separate tabulation. For comparison purposes, the per pupil media center expenditure for each selected school, as computed by the writer, was totalled. The data was incorporated into two additional tables: one table for schools which included all budget categories cited in the questionnaire and another table for those schools which did not include audio-visual equipment. Incorporated in these two tables are the budgets from categories 4 and The figures were then ranked in descending order based on the 1971-72 fiscal year expenditure. (See Appendix D).

New tables and graphs, where applicable, were developed, from the data tabulation in order that a more comprehensible format for further study would be possible. After careful examination of the culled data, the writer decided that eleven of the twenty-four questions on the questionnaire (Part I: Questions 2, 4, 6, 7, 8, and 9; Part II: Question 5; and Part III: Questions 1, 3, 5, and 6) needed only a written description to represent the responses received from the selected schools. Final tabulation required eight tables, four to be



found in the text⁵ and four in Appendix D; and thirteen figures in the text.⁶

The data about the school and its program are presented in: Tables I and II which deal with the schools' staff specialists and the subjects and grades in which individualized instruction is used: and Figures 1 and 2 which, for ease of presentation, show the schools' grade sequences and the student to professional staff ratios. The physical aspecis of the media centers are detailed in: Tables III, IV. V A, V B, V C, and V D, which list the media centers' materials and their budgets; Figures 3, 4, 5, 11, and 12, which illustrate the media centers' seating and activities accommodation and the professional and supportive media center staff. The media centers' programs are further elucidated by: Figures 7, 8, 9, and 10, illustrating the media centers' services provided for staff and students, the types of individualized instruction occurring in the media center, and the types of help students need in the center. All tables are in descending order of frequency. Where there is more than one column of data, the order is determined by the data in the first column of the table. When the use of percentages seemed inordinately confusing, the writer decided to use the actual number of responses. The tables and figures make it possible to observe the emergence of patterns for study and evaluation.

The towns per pupil expenditure for the school year 1970-71



^{5.} See tables in Chapter IV.

^{6.} See figures in Chapters IV and V.

(the latest figures available) were obtained from the Secretary of State in Connecticut. The selected schools were divided, by the writer, into quartiles in terms of the town's per pupil net current expenditures. The writer also divided the totalled per pupil media center budgets into quartiles. Comparisons were then made between the ranking of the town's school budget and that of the media center budget.

Having completed the accumulation of data, its tabulation and its graphing, interpretation, analysis, and evaluation of the data became possible. The discussion of same follows in subsequent chapters.



^{7.} Local Public School Expenses & State Aid in Connecticut (Hartford: Connecticut Public Expenditure Council, Inc., 1972).

CHAPTER IV

REPORT OF THE DATA

This chapter will present the data which were obtained from the forty-seven respondents to the questionnaire. All of the information considered herein was gathered from the questionnaires. For ease of reporting, the data are divided into three sections: schools and their programs; media centers: staff, space, materials and equipment; and media center use.

Schools and Their Programs

School populations among the forty-seven schools studied ranged from 167 to 1600 students. The median population is 550 students. There are nine different grade sequences represented in the selected schools from pre-Kindergarten through eighth grade. Twenty-eight (60%) schools responding have a K-6 sequence; nine (19%) schools have a K-8 sequence; three (6%) schools each have a K-4, a K-5, and a 2-4 sequence; two (4%) schools each have a 1-5 and two (4%) more a 1-6 sequence; and one (2%) school has a Pre-K to 5 and one has a 6-8 sequence (see Figure 1).

The professional staff in the schools studied ranges in numbers from eight to fifty-eight teachers. The student to professional staff ratio varies from twelve and one-half to twenty-seven, with the mean at nineteen students (see Figure 2). Thirty-four (72%) schools are suburban, nine (1%) urban, and four (%) rural according to each respondent who determined whether the school is considered suburban, urban or rural.



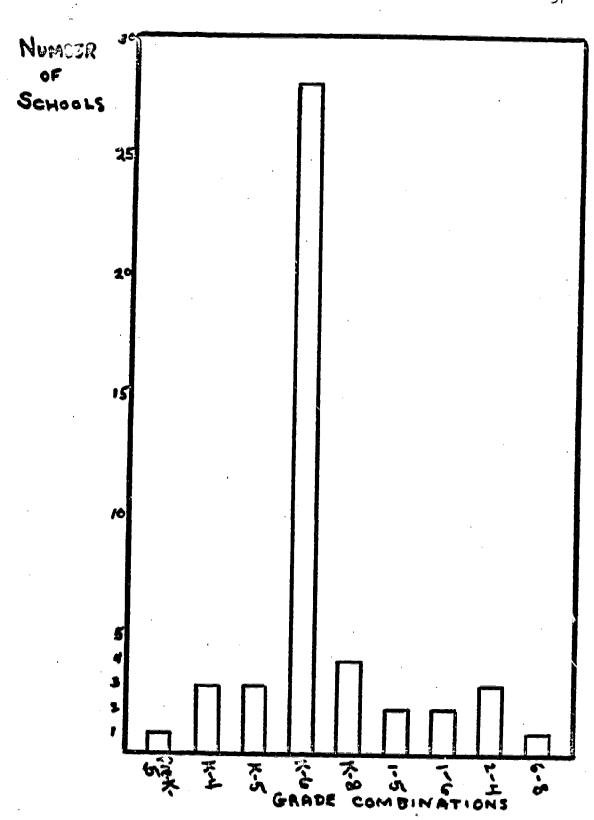


FIGURE 1

NUMBER OF SCHOOLS WITH THE DIFFERENT GRADE COMBINATIONS



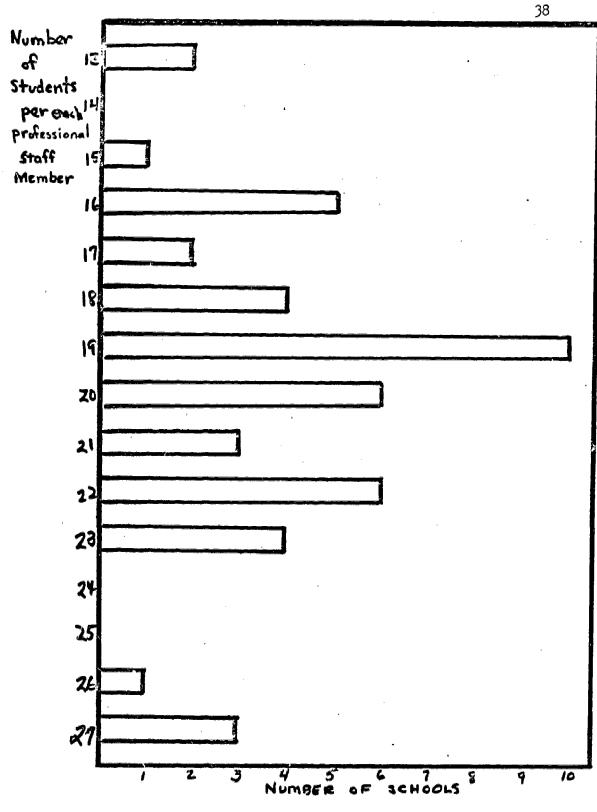


FIGURE 2

RATIO OF PUPIL TO PROFESSIONAL STAFF IN THE SCHOOLS



Most of the schools have subject specialists on their staff (see Table I). Reading specialists are on the staffs of forty-five (96%) schools. Twenty-one of these schools have full-time specialists; and twenty-four have part-time. In frequency, the next group of specialists is the perceptually handicapped. Thirty-three (70%) schools have specialists for the perceptually handicapped. Twentythree of these are full-time and ten are part-time. The third group in order of frequency is that of the audiovisual specialists. Twentythree (49%) schools have these specialists on their staffs. Of these, ten are full-time and thirteen are part-time. Curriculum consultants are on the staffs of sixteen (34%) schools. Four of the sixteen are full-time; twelve are part-time. Sixteen (34%) schools have science consultants on their staffs. One of these consultants is full-time; the remaining fifteen are part-time. Math consultants are on the staffs of fifteen (32%) schools. One is a full-time consultant; the remaining fourteen are part-time.

Table I
Specialists on Staff

	Full or part-time	Full-time	Part-time
Reading specialist Perceptually handicapped	45(96%)	21(45%)	24(51%)
specialist Audio-visual specialist Curriculum consultant Science consultant Math consultant	33(70%) 23(49%) 16(34%) 16(34%) 15(32%)	23(49%) 10(21%) 4(9%) 1(2%) 1(2%)	10(21%) 13(28%) 12(25%) 15(32%) 14(30%)



The individualized instruction programs in the elementary schools studied are of several types. The most frequently noted program is the individually prescribed instruction in twenty-eight (60%) schools. The other programs are, in descending order of frequency, student tutors in twenty-four (51%) schools; independent study in twenty-three (49%); team teaching in twenty-one (45%); programmed learning in seventeen (36%); non-graded curriculum in sixteen (34%); and contract learning in eight (17%) schools. Many schools are involved in using more than one type of individualized instruction program. Seventeen (36%) selected schools use two or three different programs and seventeen (36%) use four or more programs for individualized instruction.

Twenty-three (4%) schools studied use individualized instruction for at least two subjects in all grades. Nine of these schools are deeply involved, using individualized instruction in all grades for all five major subjects. Twenty-four (51%) schools use individualized instruction selectively, in some grades and in some subjects.

The data indicate that the subject area in which the most individualized instruction takes place is in reading (see Table II).

Twenty-one (45%) selected schools have an individualized instruction program in all of the grades for reading. An additional thirteen (28%) use it selectively, predominantly in grades 2-4. In language arts, seventeen (36%) use an individualized instruction program in all of the grades and another nine (19%) use such a program selectively in grades 3 and 4. Table II also indicates that an individualized instruction program for mathematics is used in all grades in sixteen (34%) of the schools and selectively in grades 3-5 in an additional sixteen (34%) schools. In social studies, nine (19%) schools use an individualized



instruction program in all grades and another seven (15%) use it selectively in grades 4 and 5. Eight (17%) schools use an individualized science instruction program in all of the grades; and an additional eleven (23%) use it in grades 4 and 5.

Table II
Subjects and Grades Involved in Individualized Instruction

	all grades	selective usage	most frequent in grades
Reading Language Arts Mathematics Social Studies Science	21(4 <i>5</i> %) 17(36%) 16(34%) 9(19%) 8(17%)	13(28%) 9(19%) 16(34%) 7(15%) 11(23%)	2-4 3,4 3-5 4,5

Each selected school seems to employ a number of criteria for determining who participates in an individualized instruction program. The particular reasons for selection are enrichment, remedial work, the grade level or the subject to be studied. Eighteen (38%) of the schools studied select the participant for remedial work. Sixteen (34%) select the student for enrichment. Selection by subject and by grade are each used in eleven (23%) schools. Nineteen (40%) selected schools designate no special reason for selection of students to work in individualized instruction programs. Since there may be a number of reasons for selecting participants, there is an overlap in the figures.

The initiation of the individualized instruction work may be undertaken by several different people in each school studied. The teacher initiates the work in forty-three (92%) schools. Media specialists initiate the work in nine (19%) schools; while students



initiate it in six (13%) schools. Comments on the questionnaires indicated that reading teachers, curriculum consultants, and resource teachers also initiate the individualized instruction work. Coverlap occurs here because more than one person may initiate the work.

The student's progress is determined in a number of different ways. Thirty-eight (81%) schools studied depend on teacher evaluation; twenty-eight (60%) use standardized tests; twenty (43%) have student-teacher evaluations; and six (13%) use the student's personal evaluation. The overlap results from the fact that in the selected schools, there may be several ways of evaluating student progress.

The special materials for individualized instruction come from a number of different sources. Forty (85%) schools depend on the teachers and thirty-four (72%) use commercial sources. The media specialists in twenty-four (51%) schools do material preparation and students do some in seven (15%) of the schools. The selected schools, then, depend on more than one source for their special materials.

Media Center: Staff, Space, Materials and Equipment

The selected media centers are as varied as the schools which they serve. The staffing and physical aspects cover a broad spectrum.



l. Several media specialists in the schools studied commented that their schools do not have extensive individualized instruction, but that efforts are being made in that direction. The following quote from one of the specialists best summarizes this position. "The school's educational practice is still essentially traditional in style. I do NOT call reporting on one of three oceanographers selected by the teacher... either independent or individualized. With a very few exceptions, this is the pattern of assignments. We try for more individualization and sometimes accomplish it."

The media centers are able to accommodate a wide array of percentages of the student populations. At one extreme is the school that can seat 1% of its student body; at the other are the two schools that can accommodate only 3%. As seen in Figure 3, there are several clusters of schools: 1) nine (1%) schools who can accommodate 11-13% of their student population; 2) eighteen (37%) who can accommodate 6-8%; and at the lower end, 3) six (13%) school who can accommodate only 3-5% of the student body. The mean shows a seating accommodation of 9% of the student population and a median of 8%.

The media centers' staffs are headed by media specialists.

Thirty-eight (81%) schools have at least one full-time media specialist and nine (19%) schools have part-time specialists (see Figure 4).

The supporting staff consists of full- or part-time clerical help and/or teacher aides, as well as volunteer help. Figure 5 shows that twenty-four (51%) schools have full- or part-time clerks and nine (19%) schools have teacher aides. Thirty-two (68%) schools use parent volunteers and twenty (43%) use student helpers. There is overlap here because there may be more than one type of help on the supportive staff.

The major types of activities that take place in the media center are story telling, large group work, library or media skill instruction, small group work, and individual work. Different combinations of these activities take place simultaneously in the schools studied. In eight (17%) schools all five of the above activities can be accommodated simultaneously. In fourteen (30%) schools, two large group activities and two small group activities can take place at the same time. As Figure 6 indicates, two large group activities plus individual work can be accommodated in two (4%) schools and in fourteen (30%)



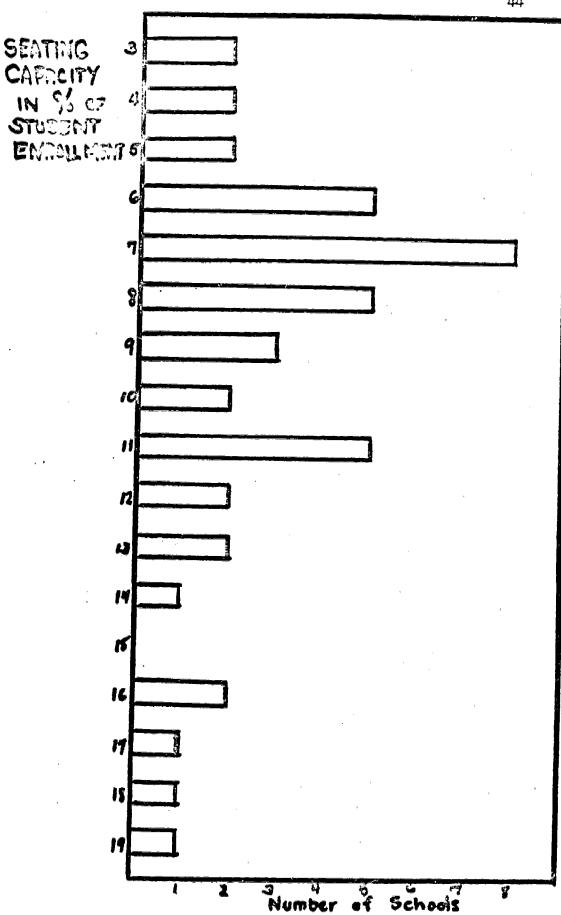


FIGURE 3
SEATING ACCOMMODATION OF THE SELECTED
MEDIA CONTORS



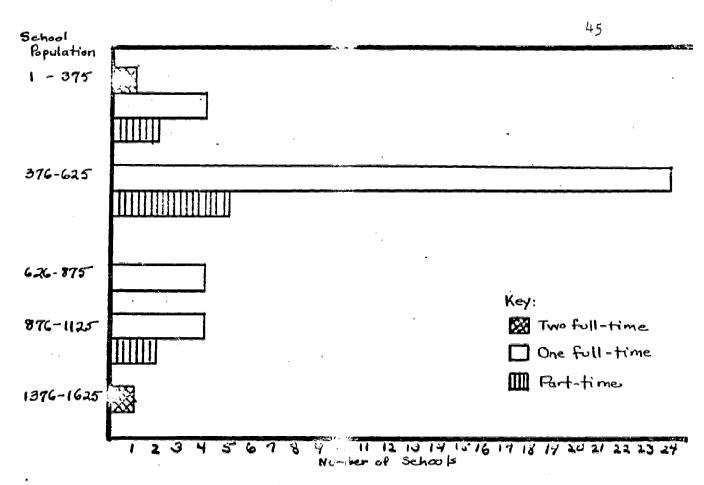


FIGURE 4
Number of Media Special sts per School Population Group

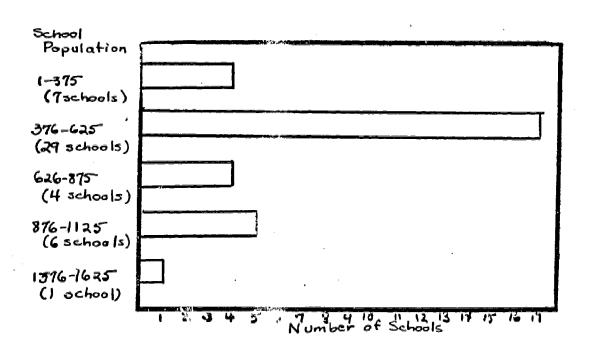


FIGURE 5

Number of Jchools with Salisted Media Center Supportive Staff per School Sopulation Group



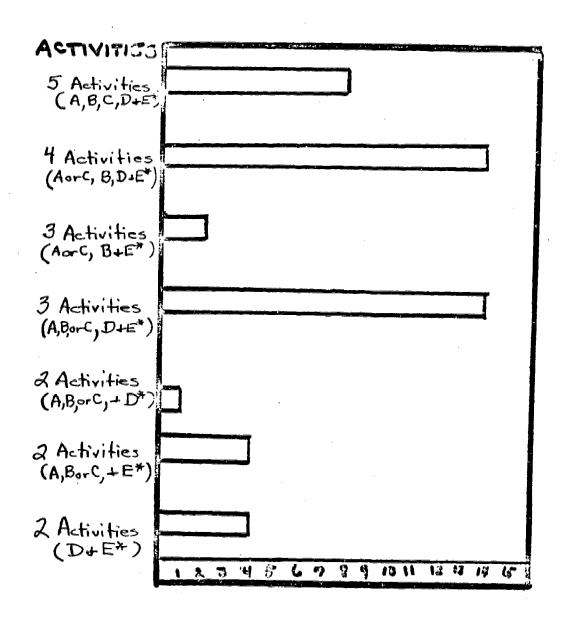


FIGURE SIMULTANEOUS MEDIA CENTER ACTIVITIES

* Activities

- A. Story-telling B. Large group work
- C. Library or media skill instruction
 D. Small group work
 E. Individual work



schools, one large group, one small group, and individual work may take place simultaneously. The combinations continue with one (2%) school that can accommodate one large group and one small group activity and individual work; four (%) that can accommodate one large and individual work; and four (%) that can accommodate only one small activity in addition to individual work.

The materials available for use in the media center, in order of frequency, are as follows:

Table III

Materials Used in the Media Center

	Used often	occasionally	not at all	not available
Books*	96%	0%	0%	0%
Filmstrips	85	11	2	0
Filmloops	60	13	<u> </u>	ğ
Study prints & illus.	55	30.	6	ú
Tapes	53	30	2	6
Disc recordings	47	32	2	ě
Graphic materials	34	47	6	4
Transparencies	30	3 8	13	2
Programmed materials	23	25	· 13	23
Realia	17	25	15	25
8 mm. films	15	17	15	34
Models & mock-ups	13	21	17	3 0
16 mm. films	11	21	19	3 4

^{*} Two (4%) schools left this category blank.

In addition to books, most of the centers studied have filmstrips, film-loops, study prints, tapes, disc recordings, graphic materials, and transparencies. Filmstrips are used often in 85% of the schools; they are used occasionally in 11% of the schools. Sixty percent of the schools use filmloops often; an additional 13% use them occasionally. Study prints and illustrations, tapes, and disc recordings are used often in



47-60% of the schools; they are used occasionally in 30-32% of the schools. Programmed materials, realia, 8 and 16 mm. films, -odels and mockups are used less and available less than the aforementioned media. These materials are used often in 11-23% of the schools and occasionally in 21-25%. They are available in 66-77% of the schools.

The materials which students may take home, in order of frequency, are as follows:

Table IV

Materials Which Students Take Home

	Used often	occasionally	not at all	not available
Books*	96%	0%	0%	0%
Study prints & illus.		17	28	19 [~]
Graphic materials	11	21	28	21
Disc recordings	11	17	30 30	21
Filmstrips	6	19	<u>3</u> 0	25
Tapes	4	17	25	28
Transparencies	4	_, 9	3 8	25
Programmed materials	2	4	34	36
Realia	ο.	6	· 30	38
Models & mock-ups	0	6	28	45
8 mm. films	0	4	32	45 36
Filmloops	0	4	<u>3</u> 6	32
16 mm. films	0	0	30	45

^{*} Two (4%) schools did not fill in this category.

Thus, 75-81% of the schools have the following available for home use: study prints, graphic materials, disc recording, filmstrips, and transparencies. These materials are used often in 4-17% of the schools; they are used occasionally in an additional 9-21% of the schools. Tapes and filmloops are available for circulation in 68-72% of the schools. They are often used in 4-6% of the schools and occasionally used in 17-19% of the schools. Programmed materials, 8 mm. films and realia are available schools.



able for home use in 62-64% of the schools' centers. These materials are used often in 0-2% of the schools; they are used occasionally in 4-6% of the schools. Finally, 55% of the schools have models and mock-ups and 16 mm. films available for home use. None of these materials are used often in the selected schools. They are used occasionally in 0-6% of the schools.

Some of the media centers do circulate equipment. Filmstrip projectors are available for home use in eleven (23%) schools. Cassette tape recorders may circulate in six (13%) schools. Two (4%) schools circulate filmloop projectors, reel-to-reel tape recorders, slide projectors, and 8 mm. projectors. Record players and 16 mm. projectors are circulated by one (2%) school which circulates all of its equipment with parental permission.

The media center budgets were divided into five groups. This was done, as stated in Chapter III, page 34, because the schools studied do not have a uniform system of budgeting materials and equipment for the media centers. The budgets were computed on the amount spent per pupil per year. The data reported below are for the school year 1971-72. In group one (see Table V A, Appendix D), ten (21%) media centers studied divide their budgets into five areas of expenditure; books, reference, periodicals, a-v equipment and a-v materials. The book outlay ranged from \$.74 - \$5.86 per pupil; the reference, \$.09 - \$1.20, for periodicals, \$.03 - \$.92; for a-v equipment, \$.37 - \$4.60 and the a-v materials outlay ranged from \$.19 - \$4.70 per pupil. In the second group (see Table V B, Appendix D), fourteen (30%) schools combine the book and reference outlays. For this group, the book and reference expenditure ranged from \$.18 - \$5.35 per pupil, the period-



icals, \$.03 - \$.48; the a-v materials outlay ranged from \$.45 - \$2.29; and only one school included the a-v equipment allocation. Table V C. Appendix D, shows the third group of nine (19%) schools, whose centers' budgets combine the book, reference and periodicals expenditures. This category had a range of \$.43 - \$5.50 per pupil. The a-v equipment expenditures ranged from \$.76 - \$3.20; and the a-v materials ranged from \$.71 - \$4.40. The fourth group of three (6%) schools with various other combinations of budget categories could not be placed in any of the above groups. One (2%) school consolidated the expenditures for books, reference and a-v materials with an outlay of \$6.68, spent \$1.40 for a-v equipment and \$.31 for periodicals. One (2%) school combined books, reference, periodicals and a-v equipment, spending \$4.50 on this outlay and \$4.28 for a-v equipment. The last school in this group had a separate category for books, on which was spent \$5.00; then combined reference, periodicals, a-v materials and equipment spending \$2.89. The fifth group of seven (15%) schools presented a single sum for the entire budget. Three (6%) schools did not give any budget and one (2%) filled in the periodical category only and, therefore, these were not tallied in the above, as indicated in Chapter 3, page 33 . For twentysix (55%) schools whose budgets included all five budget categories (see Table VI, Appendix D), the total 1971-72 expenditures ranged from \$1.60 - \$16.80 per pupil. The mean total was \$6.35 per pupil; the median was \$6.87 per pupil. For the seventeen (38%) schools whose budgets excluded the audiovisual equipment category, the total 1971-72 expenditures ranged from \$.74 - \$6.81 per pupil. The mean total expenditure was \$2.62 per pupil; the median was \$3.31 per pupil.



Media Center Use

The respondents indicated that twenty-one (45%) of the media centers are involved to a great extent in the schools' individualized instruction programs. Twenty (43%) schools are involved to some extent; while six (13%) indicated that there is no involvement in the programs.

The next question asked to what extent five services for students² are an integral part of the center's program (see Figure 7).

Reading guidance was given the highest media center involvement in twenty-nine (62%) selected schools, followed closely by listening and viewing guidance and instruction in use of media in twenty-seven (57%) schools and developing media skills in twenty-four (51%) schools.

Eighteen (38%) responded that guidance in study habits also is an integral part of the media center's program. Two (4%) respondents indicated that the latter four services (i.e. all except reading guidance) are not an integral part of the program at all.

The media centers' instructional programs are carried out in a number of different ways. Thirty-one (66%) media specialists indicated that instruction is taught to classes in the center. Twenty-seven (57%) integrate the instruction with other subjects, while being taught in the media center. Twenty-five (53%) use an informal type of instruction. Twenty (43%) use individualized instruction. Finally, thirteen (28%) school programs have integrated the media center's instruction with



^{2.} The five services inquired about were reading guidance, listening and viewing guidance, instruction in use of media, developing media skills, and guidance in study habits.

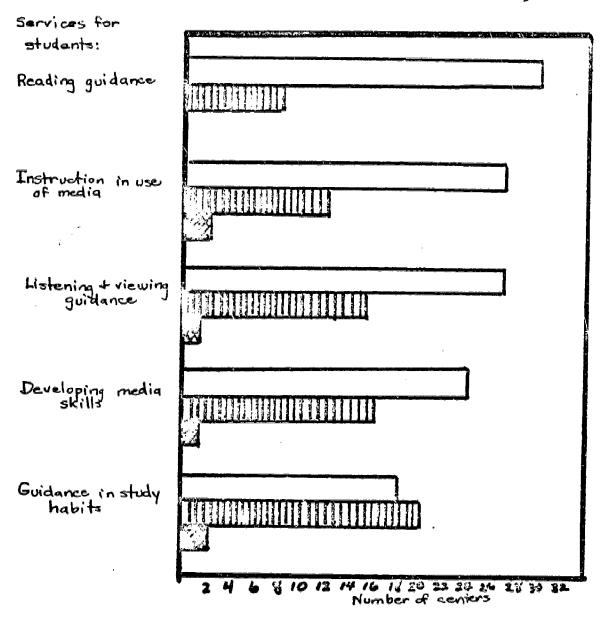


FIGURE 7

MEDIA CENTER SERVICES PROVIDED FOR STUDENTS

Key:	
	The service is an integral part of the media center program.
構	The service is, to some extent, part of the program.
	The service is not part of the program.



other subjects and present it in the classroom. Since the specialists use more than one way of instructing students in media skills, there is overlap in these figures.

The faculty calls upon the media center for a variety of services. Most frequently, the specialists are called upon to select materials in forty-one (87%) schools and to consult about available resources in thirty-nine (83%) schools. Twenty (43%) respondents often aid the faculty with material production. Fifteen (32%) respondents are asked to instruct faculty in effective media use. Thirteen (28%) respondents are called upon to inform the faculty about student progress as observed in the media center (see Figure 8). In addition, some of the participating specialists aid faculty in the following ways: cooperation on curriculum development; compilation of specific bibliographies; information about new materials, as well as programs of the Children's Museum, public library, etc.; issuance of a-v material catalogs; and help in the academic areas.

With regard to scheduling the media center, twenty-three (43%) selected schools have some classes scheduled, while other periods in the day are open for flexible use. Eleven (23%) schools have all classes scheduled; eight (17%) allow flexible use with no classes scheduled. The remaining one (2%) school has all of its time formally scheduled, whereby students must come at designated times.

Individual students come to the center to work independently at all times in thirty-six (77%) schools. Seven (15%) allow students to come at all unscheduled times, while four (9%) schools specify times for the students to come. Thus, all the selected centers provide some time for students to come for independent work.





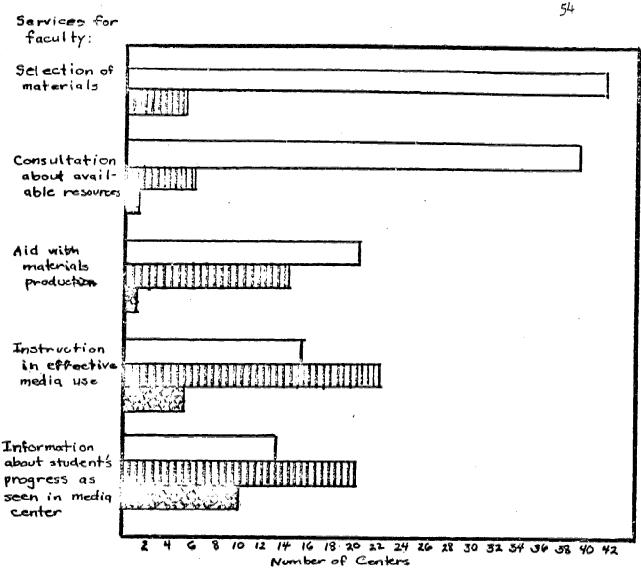


FIGURE 8 MEDIA CENTER SERVICES PROVIDED FOR FACULTY

Key: Faculty often calls upon the center's specialist for the service. Faculty occasionally calls for the service. Faculty never calls for the service.



- 3

The types of individualized instruction that take place most often in the selected media centers are individual projects in thirty-three (70%) schools and independent study in thirty-one (66%) schools. Tutoring and prescribed instruction take place often in twolve (25%) media centers. Programmed learning often occurs in nine (19%) schools. Contract learning takes place often in only two (4%) schools (see Figure 9).

Students working independently in the media center need a great deal of help in acquiring research techniques as indicated by the respondents in twenty-one (45%) schools. The next area, in which students need a great deal of help are using indexes, outlining, developing study skills, narrowing the problem and using reference materials. Fewer respondents felt that a great deal of help is needed for locating materials and for using a-v materials or equipment (see Figure 10).

The media specialists were asked to indicate, from a list of choices, which changes would enhance the scope of the individualized instruction programs in their media centers. Data indicate (see Figure 11) that specialists felt need for change in more than one area, thus, the overlap. Thirty-two (68%) respondents from the selected schools stated that the quantity of audio-visual materials should be increased. Thirty (60%) indicated a need for all media to be increased; while twenty-two (47%) wanted to see the printed materials increased. The next most frequent response was expressed by twenty-eight (60%) specialists, who indicated a need to enlarge the present facilities. Twenty-six (55%) wanted to see an increase in clerical personnel; and twenty-five (53%) would like to increase the number of professional personnel. Fourteen (30%) specialists expressed a need for an



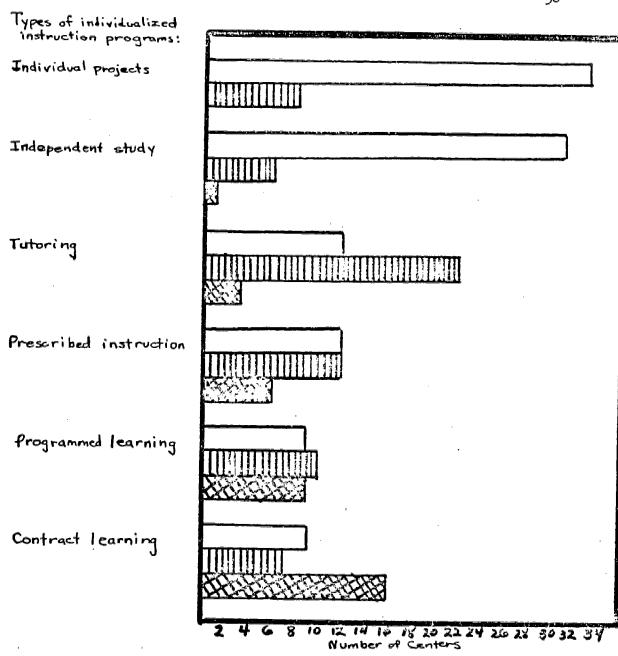


FIGURE 9

Types of IndividuaLized Instruction Programs Taking Place in the Media Center

Key:	
This type of individualized instruction program takes place often in the media center.	<u>.</u>
This type of program takes place occasionally in the center	*
This type of program never takes place in the center.	

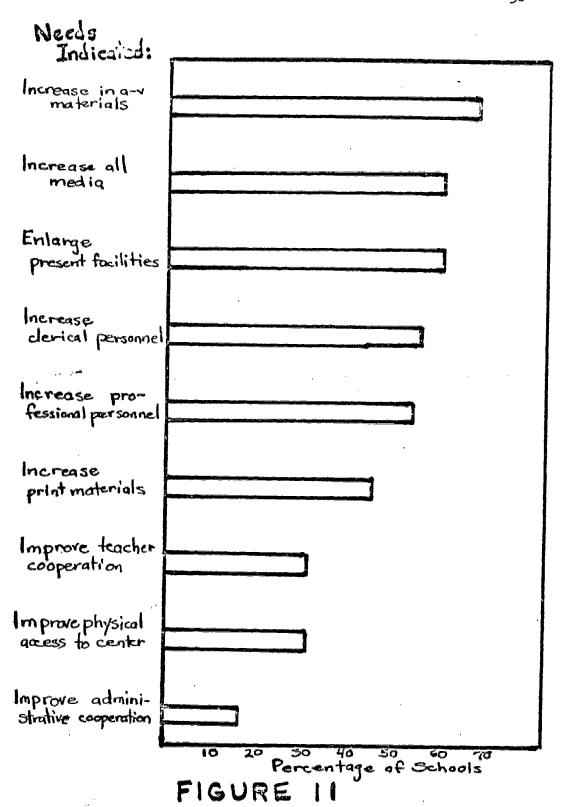


FIGURE 10 Types of assistance students need in media center



Key: Dagreat deal of help I some help

no help needed



NEEDS INDICATED TO EXTEND MEDIA CENTER'S INVOLVEMENT IN THE SCHOOL'S INDIVIDUALIZED INSTRUCTION PROGRAM



improvement in teacher cooperation. The same number indicated a desire to improve the physical access to the center. Improvement of administrative cooperation was suggested by eight (17%) of the media specialists.

The preceding pages in this chapter have reported the data culled from the questionnaires. Chapter V will analyze and evaluate this data.



CHAPTER V

ANALYSIS AND EVALUATION OF DATA

This chapter will analyze and evaluate the data as reported in Chapter IV. For this analysis, the chapter has been divided into three headings: 1) the individualized instruction activities within the schools; 2) media center statistics; and 3) the media centers' programs and the involvement in their schools' individualized instruction activities. A change in the headings became necessary in order to incorporate and analyze data from different categories of the question-naire.

Individualized Instruction Activities within the Schools

The schools selected for the study vary greatly in their populations, grade sequences, and number of professional staff. As indicated in Chapter IV, page 36, the school population ranges from 167-1600 students. The student population in schools with a K-6 grade sequence ranges from 167-1100. Schools having a 2-4 grade sequence have a more restricted population range of 240-407 students. The one school which has a population of 1600 encompasses grades 6-8. As the number of students increases, there is an increase in number of teaching staff. There is not, however, a direct relationship between student teacher ratio and the total student population. For example, in the largest school, the student-teacher ratio is 16:1; while in one of the smallest schools, the ratio is 27:1. The variable in these ratios may be due to one of several interpretations by the respondents as to the composition of the professional staff: 1) Some may have included only



classroom teachers; 2) some may have included classroom teachers with full-time personnel and 3) others may have included a full-time as well as part-time personnel.

The nine (1%) schools most actively involved in individualized instruction, using it for all grades in the five major subjects, have student to teacher ratios which range from 14:1 to 27:1; and a total student population of 427 to 600 students. Five of the nine schools with active involvement in individualized instruction have a K-6 grade sequence; with four others having the following sequences: 2-4, 1-5, K-4 and 1-6. The schools with more active involvement do not appear to differ significantly in the above respects from the other selected schools.

The subject in which the most individualized instruction takes place, as indicated by the data, is in reading. Of the forty-five (96%) selected schools that have either full- or part-time reading specialists, twenty-five have individualized reading instruction programs in all grades and twenty have individualized reading instruction programs in selected grades. Of the two (4%) schools that do not have reading specialists, one has individualized reading instruction in all grades and the other is using it selectively. Of the sixteen (34%) schools studied with science specialists, nine have individualized science instruction in all or some of the grades and seven have none; in the thirty-one (66%) schools without science specialists, fourteen use individualized science instruction in some or all the grades and seventeen do not use it at all. Individualized math instruction is used in eleven of the fifteen (32%) selected schools having math specialists; the remaining four schools do not use it. In the thirty-two (68%)



instruction. This is followed in frequency by the student tutor program in twenty-four (51%) schools, independent study in twenty-three (49%) schools and team teaching in twenty-one (45%). Thirty-four (72%) use more than one type of individualized instruction program. The most common combinations of individualized programs are 1) independent study and student tutors in nineteen (40%) schools, and 2) individually prescribed instruction and student tutors in eighteen (38%) schools. There is an overlap in these figures, because ten (21%) schools combine independent study, student tutors and individually prescribed instruction. The data do not show significant patterns for other combinations of individualized instruction programs.

There is great variation in the means selected schools use for initiating and evaluating individualized instruction work. In fortythree (92%) of the forty-seven selected schools, the teachers initiate the work. Students initiate the work in only six (13%) schools. overlap in these and the following data are discussed in Chapter IV, The teachers determine a student's progress in thirty-eight page 42. (81%) schools; twenty (43%) have student-teacher evaluations. Six (13%) schools use the student's personal evaluation; four of these six are in the group of schools in which students initiate the work. Twenty-one (45%) of the selected schools involve the student in initiating and/or evaluating the learning activity. Twenty-six (55%) of the selected schools, then, are not using the more individualized methods, as indicated by the degree of teacher involvement in both initiating and evaluating the individualized learning activities in the majority of the selected schools.



schools without math specialists, twenty-six use individualized math instruction and six do not. There may be a correlation between a school having a reading specialist and its use of individualized reading instruction. No clear relationship exists, however, between a school having any other subject specialist and its use of individualized instruction in that subject.

Two other specialists who usually have contact with faculty and students are the audio-visual specialist and the curriculum consultant. Twelve of the twenty-three (49%) selected schools using individualized instruction for all grades in at least two subjects have an a-v specialist and/or a curriculum consultant. The remaining eleven schools have neither type of specialist. In the group of nine (19%) schools considered, from the data received, to be the most actively involved in individualized instruction, there is the following distribution of a-v and curriculum specialists: one school has both an a-v and a curriculum specialist; two have one full-time a-v specialist; two have one parttime a-v specialist; one has a full-time curriculum consultant and two have neither. The twenty-four (51%) selected schools seeming to have less individualized instructional activity include seventeen schools with an a-v and/or a curriculum specialist and seven who have neither. No relationships seem to exist between the audio-visual or curriculum specialist on the staff and the use of individualized instruction.

The most common individualized instruction program found in twenty-eight (60%) of the selected schools is individually prescribed



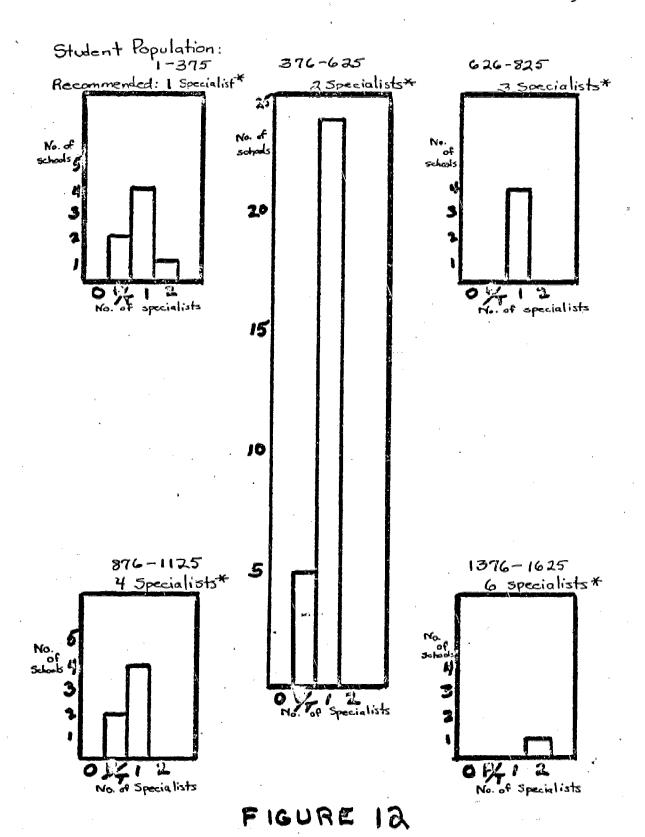
^{1.} A variable to be considered in determining the number of audiovisual specialists is whether media center specialists had been included in this category.

Media Center Statistics

There is a rather broad variation in the number of media staff, amount of seating, and types of material and equipment available in the media centers of the schools studied. Thirty-six (77%) of the fortyseven selected schools have one full-time media specialist directing the media center program. The remaining eleven (23%) schools can be divided into nine that have part-time media specialists and two that each have two specialists. Of the latter two schools, one is a demonstration school media center and the other has a student body of 1600 (see Figure 12). Data indicate no direct relationship between the number of media specialists and the student population. One specialist is the median for this study; the median student population is 550. Four (9%) schools have resource teachers on the media staff, one of these has two such teachers. These personnel, considered by their schools to be part of the professional media staff, have state certification in elementary school education. Of the seven (15%) centers with professional staff that are up to standards (see Figure 12), five are greatly involved in the school's individualized instruction program; the remaining two are involved to some extent. The forty-one (85%) centers, whose staffs are not up to the strength recommended by the standards (see Figure 12), include sixteen centers which are greatly involved and eighteen which are involved to some extent. The remaining seven either did not respond to the question on the center's involvement or indicated no involvement.

With regard to supportive staff, there is also a broad variation. Twenty-four (51%) selected media centers depend on volunteers





NUMBER OF MEDIA SPECIALISTS PER STUDENT

in addition to salaried personnel. Thirty-two (66%) centers have fullor part-time salaried supportive staff; fifteen (32%) depend on volunteers only; and one (2%) has no supportive staff, including volunteers.
Eight (17%) of the centers do not use volunteers; seven of these have
full- or part-time salaried staff. The number of supportive staff does
not seem to affect the center's involvement.

Seating and accommodation of activities in the media center do show a relationship to each other. The eight (17%) media centers that can accommodate five simultaneous learning activities can seat, on the average, 12% of their student population. Those providing for three and four simultaneous activities can seat 9%; and those accommodating only two simultaneous activities can seat only 6% of the student populations.

The materials that show a high percentage of use by, and availability to, students in the media center are books, filmstrips, study prints and illustrations, and disc recordings (see Chapter IV, page 47). The materials that are used relatively little are programmed materials, realia, 8 mm, and 16 mm, films, and models and mock-ups. These materials, however, are available to some degree in 66-70% of the media centers studied. The media most often taken home by students are books. There is a decided drop in student usage of the non-print media. Data indicate that study prints and illustrations, graphic materials, disc recordings, filmstrips, and transparencies are available for home use in 75-81% of the centers; and realis, filmloops, 8 mm, and 16 mm, films and models and mock-ups are available in 55-68% of the centers. Although apparently available for home use by students, 25-36% of the specialists say the a-v materials are not taken home. This con-



flict of data has led the writer to question the true availability of said media for home usage. There may be several reasons for this conflict of data: 1) the accompanying a-v equipment does not circulate, thus restricting the a-v materials' home use; and 2) a misinterpretation of the question, confusing the "not used" column with the "not available" column.

Few schools allow equipment to circulate outside of the school. The filmstrip projector is circulated by eleven (23%) schools. Ten of the eleven schools also circulate filmstrips, often or occasionally. In the other school, filmstrips are available but not used at all. Cassette tape recorders are circulated by six (13%) schools. Five of the six centers circulate tapes and in the remaining center the tapes are not available for home use. The one school that allows all of its equipment to circulate, also allows all of the material to circulate.

The media center budgets were divided into groups by the categories of their expenditures (see Tables V A, V B, and V C, Appendix D). The group that divided its budget into five categories (books, reference, periodicals, a-v equipment, and a-v materials) spent more on printed materials than the groups that combined two or three categories. Comparing the expenditures on books, reference, and periodicals, the group one outlay (See Table V A, Appendix D), ranged from \$.86 to \$7.98; group two (Table V B, Appendix D), ranged from \$.21 to \$5.83; and group three (Table V C, Appendix D), ranged from \$.43 to \$5.50. There are twenty-one (45%) centers whose budgets are broken down into outlay for print and a-v materials. Out of these twenty-one, nineteen had spent more for print than a-v materials; fifteen of the twenty-one centers spent more than double on print materials.



In a publication of the Connecticut Public Expenditure Council,
Inc. is a ranking of Connecticut towns according to per pupil expenditures for the school year 1970-71. The selected schools ranked as
follows: thirty-four (72%) in the top quartile, four (9%) in the second
quartile; seven (15%) in the third quartile; and two (4%) in the fourth.
A degree of correlation may be found between the media center budgets
and the towns' per pupil expenditure ranking. There are twenty-two
schools in the top ranking of media center budgets (see Figure VI):
eighteen (82%) are in the top quartile of the towns' per pupil expenditures in Connecticut; three (14%) in the second quartile; and one (4%)
in the third (see Figure A following page). The twenty-one schools in
the bottom half of the media center budgets divide thus: thirteen (62%)
are in the top quartile; one (5%) in the second quartile; five (24%) in
the third; and two (9%) in the fourth quartile of the towns' per pupil
expenditures.

The proportion of the town's per pupil budget spent on the media center varies greatly. One of the schools is among the lowest of the 169 towns in total expenditure in 1970-71, but just under \$6.35 per pupil for the media center which is the mean of the selected total media center budgets. Eight schools in the highest quartile of the total town expenditures spent much less than the aforementioned school, with their total media center budgets ranging from \$3.45 to \$5.47 per pupil.

A relationship exists between the town budget ranking and the media center professional personnel (see Figure 13). Of the thirty-four



^{2.} Local Public School Expenses & State Aid in Connecticut, (Hartford: Connecticut Public Expenditure Council, Inc., January 1972). pp. 32-35.

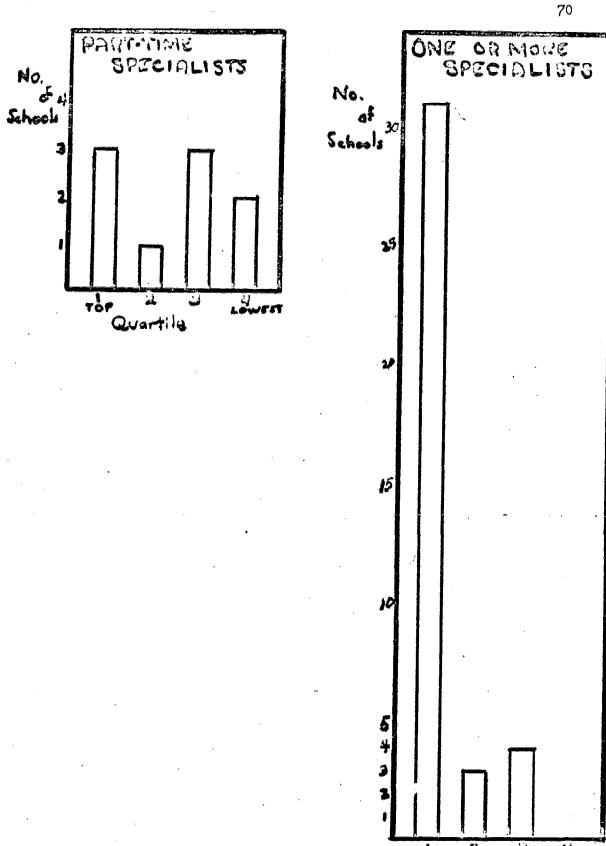
schools (72%) in the highest quartile, thirty-one schools have full-time media specialists. Four schools (9%) are in the second quartile of which three have full-time specialists. Seven schools (15%) are in the third quartile; four have media specialists full-time. Neither of the two schools in the lowest quartile have full-time media specialists. Thus a greater proportion of those schools in the lower quartiles of town expenditures have part-time media specialists.

Media Center Programs and their Involvement in the Individualized Instruction Programs

Each selected media center specialist was asked to indicate the extent to which the center is involved in the school's individualized instruction program. Twenty-one (45%) respondents indicated great involvement; twenty (43%) indicated some; three (6%) no involvement; and three (6%) did not respond to the question.

Nine (19%) specialists indicated their schools use individualized instruction in all five subjects for all grades. Of these nine specialists, eight stated that the media center is involved to a great extent in the school's program. In the twelve schools (25%) which use individualized instruction in all grades for two to four subjects, five indicated great media center involvement; five indicated some; one indicated no involvement; and one did not respond. Twenty-four (51%) have some individualized instruction scattered throughout different grades and subjects. Seven of these schools have media centers with great involvement in the individualized instructional programs; thirteen have some involvement and two have no involvement. Data would indicate that there is more media center involvement in those schools with strong individualized instructional programs.





MEDIA SPECIALISTS PER QUARTILO RANKING OF THE TOTAL TOWN PER PUPIL EXPENDITURE

FIGURE 13

Quartila



The selected centers which are greatly involved in the schools' individualized instructional programs have more flexibility in scheduling and more individualized methods of media skills instruction.

Fifteen of the twenty-one (45%) centers which are greatly involved in the schools' programs have more flexible schedules; while nine of the twenty (43%) centers with some involvement have more flexible schedules. Media specialists in sixteen of the twenty-one (45%) centers greatly involved in individualized instruction use more individualized instruction methods in their own teaching. Specialists in seven of the twenty (43%) centers involved to some extent also use more individualized methods. A larger proportion of the greatly involved media centers have more flexible scheduling. In these centers there is also greater use of individualized media skills instruction.

The authorities indicate that the media center should provide reading guidance, listening and viewing guidance, media instruction, guidance in study habits, and development of media skills. Forty-five (96%) media specialists indicated that the above services are, to some extent, part of the media center program. As Figure 7, page 52 indicates guidance in study skills is provided often in eighteen (38%) selected schools indicating that twenty-nine (62%) centers are not seriously involved in providing that service. Yet this is an area which the data indicate students working independently need a great deal of help.

Many media specialists indicated the students' need for guidance in study skills and methods of inquiry. Fewer students need help in locating materials and using a-v materials and equipment, as shown by Figure 10, page 57. The emphasis seems to have shifted to research



techniques and independent study skills in the media center. The shift apparently is not accepted by twenty-nine (62%) of the selected schools as an integral part of the center's program as indicated by the data on services provided students. (see Chapter V, page 71).

Authorities say that the services provided for the teacher are very important to the involvement of the media center in the school program. The selected media specialists indicated that the faculty calls on the center frequently for materials selection in forty-one (87%) schools and consultation on available resources in thirty-nine (83%) schools. In twenty (43%) selected schools the faculty often ask for aid with materials production. Only thirteen (28%) schools call upon the media specialist to instruct the faculty in effective media use and to inform the faculty about students' progress as observed in the media center. No attempt was made in this study to determine the involvement with curriculum development. The media specialists who indicated they would like to see more teacher cooperation, also indicated that the teachers call on them (media specialists) only occasionally, or not at all, for the last three services; i.e., aid with material production, instruction in effective media use, and information about student progress.

With regard to the types of individualized instruction that the school has and the types of individualized instruction that are undertaken in the media center, the most active participation by the center is with the independent study program (see Figure 9, page 56.). Other individualized instruction programs do not often take place in the media center. Thus, much of the individualized instruction work does not occur in the media center.



Few of the selected media centers were completely satisfied with their center's involvement in the school's program. Forty-six (98%) of the specialists indicated at least one area in which the center could be improved.

To extend the media center's involvement in the school's individualized instructional program (see Figure 11, page 58) twentyfive (53%) to thirty-two (68%) media specialists felt that it would be necessary: 1) to increase the media collection; 2) to enlarge present facilities; and 3) to increase the number of professional and clerical personnel. Three of the fifteen (32%) specialists who did not indicate a need for an increase in the media collection have twelve of the thirteen listed types of materials. The remaining twelve have new of the listed materials available in their media centers. Eighteen media specialists (40%) indicated their centers did not need expansion; six of these schools can accommodate five types of student activities simultaneously and seat an average of 12% of the student body. The remaining twelve centers not indicating a need for expansion can accommodate only two to four such activities and can seat less than 9% of the student body. Forty (85%) schools studied are not up to standard for professional personnel. Of these forty twenty-three media specialists indicated they need additional media professionals. Another two, whose centers do meet standards in staffing, also indicated a need for additional personnel. Nineteen of the above forty schools, however, did not indicate a need for more professionals, yet are below recommended standards. Many of the needs of the selected media centers in areas below standards were not articulated by the specialists.

Fourteen (30%) media specialists indicated there is need for



improvement in teacher cooperation. Eleven of these fourteen centers have only some or no involvement in the schools' individualized instructional programs. Eight (17%) specialists indicated a need for improvement in administrative cooperation. Six of the eight centers have only some involvement. More administrative and teacher cooperation, therefore, are needed by the centers with less involvement than those with great involvement in the schools' individualized instructional programs as indicated by the data.

The following comments made by two media specialists best summarize efforts toward involvement in the schools' individualized instructional programs: "Cur program...is constantly varying to meet the needs of the children and staff. There is much variety in teaching methods used and the media center works with each group in whatever way is appropriate for them." The next comment emphasized the media center's role in the school's program: "The principal and the librarian consider the Media Center program as integral part of the curriculum. A flexible schedule allows teacher and librarian to plan together to satisfy instructional needs. The Media Center is an active place used by children individually, in small groups, and by classes."

Findings

The tabulated data indicate that the scope of the individualized instructional programs in the schools studied is not correlated
with student population; teacher-student ratio; grade sequence; or the
presence on the staff of an a-v specialist and/or a curriculum consultant. Significant correlation does seem to exist between a school
with a subject specialist on its staff and the extent to which individ-



ualized instruction is provided in that subject, particularly in reading.

Current literature recommends individualization of instruction. According to Edling, 3 the aims of individualized instruction are individual—and learner-oriented rather than group—and teacher-oriented. The more individualized methods have the student initiating and evaluating the learning activities. In the selected schools the teachers are heavil—involved in both aspects. Data in this study show that the selected schools are not using the more individualized methods. It is important to have staff in sufficient number. The standards continue, by specifying that the media center should have one full-time media specialist for every 250 students, or major fraction thereof. Figure 12, page 65 shows that only 1% of the centers can be said to meet the recommended standards.

Adequate supportive staff results in a more efficient center, the standards state. The recommended supportive staff should be one media technician and one media aide. None of the selected schools came near these recommendations.

The staffing of the selected media centers, then, is significantly below standards. Only 15% of the centers can be considered to have
an adequate number of professional staff members. The supportive staff
is also inadequate. Most of the schools depend to a greater or lesser
degree on volunteer aid.



^{3.} Jack Edling, <u>Individualized Instruction-A Manual for Administrators</u>. (Corvallis, Oregon State University, 1971).

^{4.} Standards for School Media Programs. (Chicago and washington, D.C.: American Library Association and National Education Association, 1969).

^{5.} Standards. p. 15.

Five (11%) of the selected centers are able to seat 15% of the student population recommended by the standards. The data from this study indicate that the majority (8%) of centers are not able to accommodate the recommended standard.

The standards recommend that there should be space for the following functions; individual viewing and listening; storytelling; information services; conferences; small group work; and larger group projects. Less than one-fifth of the schools can, in their present set-up, meet the recommendations for the above media center function. Data show that the centers able to seat more of the student body are also able to accommodate more simultaneous activities.

Authorities emphasize the importance of an extensive selection of materials, in breadth and depth, in subject and types of materials. The resources must be easily accessible to both students and staff for school and home use. This is not always the situation in the selected schools. There is not as broad a selection of materials in many of the selected centers as is recommended. Even greater restrictions are placed upon materials which are available for home use. Many types of media, other than books, are not available for use outside of the school.

With regard to equipment circulation, the standards say that equipment should circulate as it becomes portable. Few of the schools actually allow equipment outside the school. Only one school allows all equipment to circulate.



^{6.} Standards, p. 40.

^{7.} Standards, p. 40-41.

^{8.} Standards, p. 24.

^{9. &}lt;u>Standards</u>, p. 24.

"To maintain an up-to-date collection of materials in the media center not less than 6 per cent of the national average per pupil operational cost should be spent per year per student. (The 1968-1969 estimated national average for per pupil expenditure is \$680.00)."

According to that figure, 6% would be \$40.80. In only three instances (see the 1969-70 total media center budget, Table V D, Appendix C) did the media centers' budgets ever exceed the \$40.80. The total 1971-72 per pupil expenditure ranged from \$16.30 to \$1.60 with the mean at \$6.35. The standards recommend that about half of the amount should be spent on printed materials and half on audiovisual materials. In most cases, the recommended split was not followed. More was spent on print than on a-v materials. Data indicate a relationship between the town per pupil expenditure and the amount of media specialist time.

To summarize, none of the media centers in this study met all of the 1969 recommended standards.

Experts in the field state that the school media center should be the nerve center of the school. Richard Darling says that the media center should be the focal point of the instructional program. Ruth Davies states that an effective library program is an educational and necessity. Both the educational and media programs must be interdependent if each is to be strong. While all the centers provide materials, equipment and services to some extent, most of the schools media centers in this study do not seem to be the nerve centers of



^{10.} Standards, p. 35.

^{11.} Richard Darling, "IMC-Library Services." <u>Instructor</u> 77:84, November 1967.

^{12.} Ruth Ann Davies, The School Library - A Force for Educational Excellence. (New York: Bowker, 1969).

their schools, however. Many indicate only some or no involvement in the schools' individualized instructional programs.

In those selected schools that are more deeply committed to individualized instruction, the media centers are involved to a much greater degree. These schools have more flexible scheduling, their instructional programs are more individualized and there is more teacher and administrative cooperation.

With regard to the services the media centers provide the students, Frances Henne¹³ says that the teaching of the use of the library resources must include guidance in viewing and listening skills as well as study skills. In the selected centers, guidance in study skills is not provided as much as the other services are (only 38% of the centers provide it as an integral part of the program). Many media specialists pointed out that more students need guidance in study skills; while fewer need a great deal of help in locating or using materials and equipment. The emphasis seems to have shifted to the research techniques and study skill aspects of media center use. despite this shift in student need, the data indicate that guidance in study skills is not offered as much as now may be necessary.

Regarding the instructional program, the standards say,

"Although most of this instruction will be done with individual students
in the media center, some can be presented by teachers and media specialists in the center or in the classroom, with the size of the group
to be instructed determined by the teaching and learning needs."

14



^{13.} Frances Henne. "School Libraries." (American Association of School Libraries. 15:4 May 1966), pp.15-23. Reprinted in Daties, pp. 359-367.

^{14.} Standards, p.8.

Sinty-six percent of the centers instruct classes in the media center.

Many of the selected centers, then, may be using more traditional methods of instruction.

Teachers look to the media specialist to "provide information about new materials; to make these materials easily and quickly accessible; to produce needed materials; to assist them in keeping informed about recent developments in their subject areas and in educational trends; to channel information regarding students' progress and problems; to organize and conduct inservice courses on the full spectrum of media and their uses; to instruct students in the use and resources of the media center as the needs of the curriculum indicate; and, increasingly, to assist in the analysis of instructional needs and the design of learning activities."

The services which are most commonly provided by the selected centers are materials selection and consultation on available resources. Aid with materials production, instruction in effective media use, and information about students' progress are services provided in less than half of the centers.

The effective media center"...is the school's nerve center...
where a teacher can send a student unsupervised, at any time, for any purpose."

The standards say "Individuals or small groups of children in elementary school should have access to the media center at all times during the school day. The use of a rigid schedule for class visits is not recommended."

The majority of the selected centers have either



^{15.} Standards, p.4.

^{16.} Leroy K. Mesedahl. "IMC Contribution to Individualized Instruction." (Audiovisual Instruction, 10:9 November 1965), pp. 704-5.

^{17.} Standards, p. 24.

some or no scheduled classes. Twenty-five percent of the centers, however, do have all of the classes scheduled. In eleven of these centers, individual students have to come at unscheduled or specified times. There is not easy access to the center in these cases.

Although nearly 100% of the media spersus sts felt that there were areas which needed improvement, data indicate that many specialists have not felt or articulated the needs of their centers. Half of the specialists in centers with less involvement in the schools' individualized instruction program have not indicated needs in areas which do not meet recommended standards.

The preceding pages have given an analysis and evaluation of the data as well as discussing the firdings from the study. Chapter VI will present a summary, the conclusions, and recommendations for further study.

CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter will summarize the study, draw conclusions from the previous presented data, and make recommendations based on the findings.

The purpose of this study was two-fold: 1) to investigate how the media center functions within individualized instructional programs at selected elementary schools in Connecticut; and 2) to evaluate those med a centers in relation to their school programs based on the opinions of leaders in the field.

No study has provided data from a number of media centers in a variety of individualized instructional programs. In the opinion of the writer, therefore, a need existed for the study. The delimitations of the study included the selection of the schools; search of the literature through Library Literature, Education Index. Dissertation

Abstracts, Research in Education, and Current Index to Journals in Education, for the years 1965 to 1971; the nature of questionnaire; the respondents answers; and the interpretation of the data by the writer.



^{1.} Library Literature. (New York: H.W. Wilson Co., 1921-).

^{2.} Education Index. (New York: H.W. Wilson Co., 1929-).

^{3. &}lt;u>Dissertation Abstracts</u>. (Ann Arbor, Michigan: University Microfilms, 1938-).

^{4.} Research In Education. (Washington, D.C.: U.S. Government Printing Office, 1967-).

^{5.} Current Index to Journals in Education. (New York: CCM Information Corporation, 1969).

The procedures and techniques used in procuring the necessary data included:

- l. Selecting schools having a) an educational program using individualized instruction; and b) a media center directed by professional personnel.
- 2. Sending letters to the principals of schools initially selected, requesting their cooperation to include their schools in the study.
- 3. Searching the literature for information pertinent to the study-for the purpose of developing a questionnaire.
- 4. Developing the questionnaire to incorporate the three components of the study: a) the school and its individualized instructional program; b) the media center and its components; and c) the use of the media center by staff and students.
- 5. Pre-testing the questionnaire by sending it for criticism to several media specialists.
- 6. Sending the questionnaire to the sixty-four selected schools whose principals granted permission for their schools to participate in the study.
- 7. Tabulating the data in columns devised for each of the 351 possible responses from the questionnaire; totalling each column; and converting each sum to its percentage equivalent.
- 8. Developing tables and figures by selecting the groups of responses which needed graphic illustration to make the data more easily comprehensible.

The findings of the study, based upon the limitations, indicate a possible correlation between a school with a subject specialist on its staff and the extent to which individualized instruction is used in that subject, particularly in reading. The data indicate no correlation between a school with an a-v specialist and/or a curriculum consultant and its individualized instructional program.

From the data, it appears that many of the selected schools are not using the more individualized methods. The teachers, rather than the students, are initiating and evaluating much of the individualized

4. A. -



instructional work.

In the selected media centers, the staffing, the activities provided, and seating accommodation are not generally up to national standards. The staffing is significantly below standards. The data indicate that 15% of the selected centers can be said to have an adequate number of professional staff. The supportive staff is inadequate, with most schools depending, to a greater or lesser extent, on volunteer aid. ll% of the selected centers can seat the recommended 15% of the student population; and 15% of the centers can simultaneously accommodate five activities. A relationship exists, therefore, between the number of simultaneous activities that a center can accommodate and the percentage of its student population that can be seated in the media center.

Data indicate that there is not as wide a diversity of media nor flexibility in the circulation of that media as recommended by the authorities in the field. Only 23% of the schools circulate a-v materials for home use. Most of the selected schools do not allow a-v equipment to be taken home. Of the schools that do circulate a-v equipment, the majority allow the accompanying a-v material to circulate.

The selected media centers' budgets are significantly below the recommended standard. The budgets are not divided equally between print and a-v materials; rather, in the selected centers, there was a larger expenditure for print media. Data indicate a relationship between town per pupil expenditure and the media center expenditure.

In those schools that have more individualized instruction, the media centers are involved to a much greater degree. These schools have more flexible scheduling, their instructional programs are more individualized, and teacher and administrative cooperation is greater.



The services provided for students and staff in the selected centers are not as extensive as the authorities recommend. Students working in the media centers need research techniques and guidance in study skills more than help in locating and using materials. Research and study skill guidance are not frequently offered in many of the selected centers. The more individualized methods are not used often for media skills instruction to the students. The services most often provided for the faculty are materials selection and consultation on available resources. Aid with materials production, instruction in effective use, and information about students' progress are provided less often.

Almost all media specialists felt that there were areas in which their centers could be improved. Primarily, the need was indicated for increased media collection, center expansion, and increased professional and clerical personnel. Not all respondents, however, indicated needs in areas which do not meet recommended standards.

Suggestions for further study

- 1. Depth study of the selected media centers through site visits, observation of the media center's programs, and interviews of the media specialists, teachers, and administrators.
- 2. Depth analysis of media use, within and without the media center, in selected elementary schools.
- 3. Study of the extent of media specialists' involvement in curriculum planning and in-service training of staff _n elementary schools.
- 4. Study of the relationship between the involvement in the school's educational program and the need for more media center staffing.

SELECTED E_HLICGRAPHY

- Beggs, David W. and Edward G. Buffie (eds.). <u>Independent Study: Bold New Venture</u>. Bloomington: Indiana University Press, 1905.
- Bicknell, John E. et al. <u>Surmer Workshop in Individualization of Instruction Selected Fapers</u>. Fredonia, New York: State University College, 1970.
- Brick, E. Michael. "Learning Centers: the Key to Personalized Instruction." Audiovisual Instruction 12:786, October 1967.
- ______ "Magic Doors to the Enchanted Land." Educational Screen and AV Guide 50:10, January 1971.
- Brown, E(artley) Frank. Education by Appointment, New Approaches to Independent Study. Lest Nyack, New York: Parker Publishing Company, 1968.
- Current Index to Journals in Education. New York: CCM Information Corporation, 1969.
- Darling, Richard L. "The Emerging School Media Center." Wisconsin Library Fulletin 65:279, July-August 1969.
- "IMC Library Services." <u>Instructor</u>, 77:84, November 1967.
- Davies, Ruth Ann. The School Library A Force for Educational Excellence. New York: Eowker, 1969.
- Deighton, Lee C. (ed.). The Encyclopedia of Education. New York:
 Macmillan 1971.
- <u>Dissertation Abstracts</u>. Ann Arbor, Michigan: University Micro-films, 1938-.
- Dunn, Rita. "Individualizing Instruction Teaming Teachers and Media Specialists to Meet Individual Student Needs."

 <u>Audiovisual Instruction</u> 16:27, May 1971.
- Ebel, Robert L. (ed.). Encyclopedia of Education Research.
 New York: Macmillan 1969.
- Edling, Jack V. Individualized Instruction A Manual for Administrators. Corvallis: Oregon State University 1971.
- Edling, Jack V. Individualized Instruction Project struction Stanford, California: Institute for Communication research, (n.d.).
- _____. "Individualized Instruction, the way It Is 1970."

 Audiovisual Instruction 15:13, February 1970.



- Programs, Phase I Analysis and Interpretation." Final Report. Monmouth, Oregon: Oregon State System of Higher Education, 1969.
- Education Index. New York: H.W. wilson Company, 1929-.
- Gottardi, Leslie. "Instructional Media Center Services in the Nongraded Elementary School." <u>Audiovisual Instruction</u>, 16:30, April 1971.
- Hatfield, Frances. "Member of the Team = Media Center."

 <u>Instructor</u> 80:51, November 1970.
- Havighurst, Robert J. "Educational Changes, Their Implications for the Library." American Library Association Eulletin 61:537, Fay 1967.
- Heathers, Glen. "A Definition of Individualized Education."

 A paper presented at the annual meeting. New York:

 American Educational Research Association, 1971.
- Hillson, Maurie and Ronald Hyman. Change and Innovation in Elementary and Secondary Organization. 2nd ed. New York: Holt, Rinehart and winston, 1971.
- "Individualized Instruction." Problems in Educational Research.
 Brief #16. Washington, D.C.: Office of Education, 1970.
- Indiv. Instruction Elem. A Summary of a Survey. Hartford:
 Connecticut State Department of Education, 1969 (Computer print-out):
- Library Literature. New York: H.W. Wilson Company, 1921-.
- Library Teachers Element ry Schools. Hartford: Connecticut State Department of Education, 1970 (Mimeographed).
- Local Public School Expenses and State Aid in Connecticut.

 Hartford: Connecticut Public Expenditure Council, Inc.
 1971.
- Lohrer, Alice. The Identification and Role of School Libraries that Function as I.J's and Implications for Library Education in the United States. Urbana: University of Illinois, 1970.
- Mason, Ellsworth. "Contemporary Education: A Double View."

 School Library Journal 16:35, November 1969.
- Meseldahl, Leroy K. "INC Contribution to Individualized Instruction." Audiovisual Instruction 10:704, November 1965.



- Research in Education. Washington, D.C.: Ut ed States Government Frinting Office, 1967-.
- Standards for School Library Programs, Chicago, American Library Association, 1900.
- Standards for School Media Programs. Chicago and Washington, D.C.: American Library Association and National Education Association, 1969.
- Sullivan, Peggy (ed.). Realization: the Fire Report of the Knapp School Libraries Froject. Chi Go: American Library Association, 1968.
- Washburne, Carleton and Myron M. Stearns. Enter Schools.

 New York: John Day Company, 1928.

APPENDIX A



EXHIBIT 1

19 Carriage Drive Woodbridge, Conn. 20 February, 1972

Dear

I am carrying out a study of library media centers and individualized instruction programs in Connecticut. This survey is part of my library science thesis at Southern Connecticut State College. I would like to have the cooperation of your school in obtaining a composite picture of the role of the library media center in programs such as your school has.

May I send a questionnaire to your librarian? I am enclosing an addressed postcard for the reply and hope for your favorable response to my request.

A summary of my findings will be sent to participating institutions.

Thank you.

Sincerely,

Mrs. Lubert Stryer



EXHIBIT 2

	,
No, do not send it.	
$t = \frac{T_1}{t_0}$	
•	Principal

	School



APPENDIX B



93

QUESTIONNAIRE ON MEDIA CENTERS AND INDIVIDUALIZED INSTRUCTION PROGRAMS

					You	r nam	e:			<u> </u>			
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						:	To	VΠ					
	No	ime of school	G1	rades			No. or	prof	ession	al sta	ff		
		o. of teacher aldes						•					
2	. Ti	e school is	urban	sub	ourbar) 	rural	[,					
3	. Ple	ease indicate if the	e followin	g spec	ialist	s in y	our sc	hool a	re pai	t-time	e or f	ull-t	ime
			Part	Full					•		Pa	art	Ful
	re	ading specialist	i		curi	ciculu	m con:	sultani	t .				
		math consultant curriculum consultant perceptually handicapped specialist							st				
		ience consultant					·						-
		dio-visual special	ist		-	***						<u> </u>	
4	. WI	nat type of individu	ial instru	eti o n t	orogra	am doe	es vou	r scho	ol hav	re?		r	ż
-	•	* -			-						ኍ		
		individually prescribed instruction programmed learning non-graded curriculum team teaching								á			
		contract learning student tutors											
	independent study Other:												
		<u> </u>	ciy			Οt	ner: —						
			All grades	K	1	2	3	4	5	6	7	8	
	-	ading					<u> </u>		ļ	<u> </u>	<u> </u>		_
		nguage arts					ļ	ļ	ļ	 	ļ	<u> </u>	
		thematics	<u> </u>				 -	<u> </u>	 	 	<u> </u>		-
		cial studies					 	ļ	ļ	 -	ļ		
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	Otl	ner:					ļ	-	ļ				
							<u> </u>	<u> </u>	,	<u> </u>	<u> </u>	.1	
6.	. Th	The students who participate in individualized instruction are											
		selected by gra	de.			selec	ted fo	r enri	chmer	t worl	ς.		
		selected by sub				not s	pecial	ly sele	ected.				
		selected by subject. Selected for remedial work. Other											
7.	. Th	e individual instru	ction wor	k is u	sually	· initia	ted by						
						the s	tudent.						
		the teacher. the library media specialist. Other:											
8.	, Th	e student's progre	ss is dete	rm ine	ed by								
-,		standardized to				stude	nt's o	vn eva	luatio	п.			
		teacher evaluat											
		student - teachd		ion.	Othe	r:							
						-							



9.	Special materials for individualized instruction are prepared by											
	teachers. library media poecial curriculum consultant		Othe	students. commercial sources. Other:								
	EDIA CENTER - STAFF, SPACE, MATERIALS, AND EQUIPMENT How many students can your center accomodate? How many of the following are on the media center staff? full-time library media specialist(s) part-time library media specialist(s) part-time clerk(s) If so, are they shared with another school?											
	school? school? teachers teacher aides student helpers											
3.	Of the following activities, story-telling large group work (cla library skill instruction	ss)		small g	group w ual wor	ork k			?			
4.	The following materials are used by students in the media center; at home In the media center Available for home use											
		not avail- able	often	occa-	not at all	not avail- able	often	occa-	not at all			
	Books											
	Tapes											
	Disc recordings											
	Filmstrips											
	Filmloops											
	Transparencies											
	Programmed materials											
	Realia											
	Models and mock-ups Graphic materials (maps, graphs, diagrams)											
	Study prints and illus.											
	8 mm. films				ļ							
	16 mm, films			1		K			1			



	5.	Which of the following p	ieces of	equipment	are av	ailable t	o student	s fo	r home use	?	
		slide projector		{	mm.	projecto	or				
		film strip projecto	i*		.6 mm.	, projec	tor.				
		film loop projector				player					
		cassette tape recor							···		
	6.	Approximately, what has	s been tl	ne budget fo	r your	media (center?				
			1971-	72 197	0-71	1969	9-70				
		Books									
		Reference									
		Periodicals									
		Audio-visualequipment									
		Audio-visualmaterials									
III.		EDIA CENTER USE		_					_		
	1.	To what extent is your li			· invol	ved in th	ie individ	uali:	zed ·		
		instruction program in y	our sch	ool?							
		to a great extent		to som	e exter	nt	no	t in	volved.		
	2	The what autout is each o	f the fol	lauina an i	tama1	part of	the medi	1 60	nter proce	ירו מ	
	2. To what extent is each of the following an integral part of the media cen										
		m. n		to a great	extent	to som	e extent	- 1	not at all		
		Reading guidance	• 1			 		+-			
		Listening and viewing gu				 					
		Instruction in use of med	11a	1		ļ					
		Guidance in study habits									
		Developing media skills		<u> </u>	· · · · · · · · · · · · · · · · · · ·	<u></u>			<u> </u>		
	3,	The library instructional	l progra	m is							
		taught to classes in	the med	dia center.			in	divid	dualized.		
		integrated with othe			tht in		ini	form	nal; taught		
		the media center.						whe:	n need aris	es.	
		integrated with other	r subjec	ets and taug	ght in th	ie classi	oom.				
	4	Deep the faculty call on a	rou to								
	4.	Does the faculty call on	you to .								
					of	ten	occasion	ally	not at all	_	
		Consult about available r	esource	S			<u></u>				
		Select materials				.					
		Inform them about studer as seen in media cente	it's prog	ress						7	
		Instruct them in effective			1					7	
•										7	
		Aid them with materials	product	1011	1					-	
		Other:			}	Į.			1	1	



•	The media center has				
	all of its time fermally s all classes scheduled; of flexible.	cheduled. her times	some classes scheduled; other times flexible. no classes scheduled; all time flexible.		
,	Individual students come to th	e center to	work independently		
	at all times. at all unscheduled times.		_ at specified times. _ not at all.		
	The following types of individumedia center	alized inst	ruction are undertak a in the library		
		often	occasionally not at all		
1	Prescribed instruction				
-	Contract learning				
	Independent study				
	Programmed learning		,		
-	Tutoring				
_	Individual projects	·			
=	Other:				
	Locating materials	a gr	eat deal of help some help no help		
	Using reference materials				
	Using A-V material Using A-V equipment				
	Developing study skills				
-					
-	Narrowing the problem				
	Using indexes				
	Outlining				
-	Acquiring research technique	9			
	In order to extend the individum would be necessary to: enlarge present facilities improve physical access increase media collection.	s	increase number of professional personal increase number of clerical personal improve teacher cooperation.		
	print a-v	Oth	••• · ·		
,	improve administrative cooperation.				



EXHIBIT 4

19 Carriage Drive Woodbridge, Connecticut 18 March 1972

Dear

Your princips: has kindly consented to your school's cooperation in a study of library media centers and individualized instruction programs in selected elementary schools in Connecticut. This study is part of my library science thesis at Southern Connecticut State College.

I am enclosing a questionnaire, which I hope you, the library media specialist, will complete. From the returns, I expect to obtain a composite picture of the actual role of the library media center in programs such as your school has. Attached to this letter is a sheet defining several terms as I shall be using them. Also enclosed is a stamped envelope.

All the information received will be kept confidential. The data will be compiled and used within general categories: no specific references will be made. You will receive a summary of the findings.

I look forward to receiving your completed questionnaire and would appreciate any additional comments you might have. Thank you for your time and attention to this study.

Sincerely,

Andrea Stryer



DEFINITIONS OF TERMS USED ON THE QUESTIONNAIRE

Media specialist (librarian)

 an individual who has broad professional preparation in educational media.

Individualized instruction

- a program in which the teaching is adapted to the student's background, ability, performance and interests. It includes ways in which students are grouped and regrouped, the way time is allocated for various types of staff and student activities, the way the staff is organized for more efficient utilization of the individual talents of its members, and the way the curriculum is developed.

Individually prescribed instruction

 an educational process tailored to each student's individual needs and abilities involving diagnosis, written prescription, and continual evaluation, with carefully sequenced and detailed listing of instructional objectives.

Contract learning

- a program in which the teacher defines, on a contract, which the student signs, a concept to be learned - with its behavioral objectives and an outline of a procedure (with alternative procedures) for obtaining these objectives.

Programmed learning (or programmed instruction)

- is self-instructional, focusing the student's attention on a limited amount of material at one time; it requires a response to each segment of material; and it gives the student immediate knowledge of the results after each response.

Team teaching

- a way of reorganizing the staff so that the talents of each member can be most efficiently utilized.

Independent study

 individualized learning activities proposed or elected by the learner and, at least in part, planned and evaluated by the learner.



EXHIBIT 6

19 Carriage Dr. Woodbridge, Conn. 28 April 1972

Dear

I am writing to follow up on the questionnaire I sent you on March 18. I realize that this time of year is a particularly busy one for you, but I hope that you are able to complete the form.

As of today, more than 50% of the questionnaires have been completed and returned. I am eager to get as complete a picture as possible of media centers and individualized instruction programs in selected elementary schools in Connecticut. So that your response can be part of the data, I would appreciate your returning the questionnaire by May 12th.

Enclosed is a copy of the questionnaire and a stamped envelope. I am looking forward to your response.

With my thanks for your time and cooperation, I am

Sincerely,

Andrea Stryer



APPENDIX C



QUESTIONNAIRE ON MEDIA CENTERS AND INDIVIDUALIZED INSTRUCTION PROGRAMS

				Your	name	:					
SCI	HOOLS Name of school No. of students 161	1600 Gr	ades			Tow lo. on		ssiona	l staff		
2	No. of teacher aides The school is 19%				9%	rural.					
3.	Please indicate if the							e part	-time	or ful	l-tim
	reading specialist math consultant science consultant audio-visual speciali	Part 51% 30% 32%	Full 457. 27. 27.	curr	iculum eptual	consi	ıltant		ecialis:	Par 2 5	t Fu
4.	What type of individual instruction program does your school have? 60% individually prescribed instruction 36% programmed learning 45% team teaching 51% student tutors Other:										
5.	On the following tablinstruction takes pla	ce:	indic	ate in	which	subjec	ts and	d grade	es indi	vidua	lized
		All grades	K	1 .	2	3	4	5	6 -	7	8
	Reading	45%	4%	19%	25%		287	197	17%	2%	29
	Language arts	367.	7/5	117	1 %	17	19	13	4	Ó	7_
	Mathematics	347.	4	13	17	25	34	28	17	2	2_
	Social studies	19%	2	9	9	1/	15	13	9	9	2
	Science	173	2		11	13	21	23	15	0	2
	Other:	1-1-1-76-		<u>' ' '</u>		- 10			7.5		
	Other:										
6.	The students who para 23% selected by gra selected by sub 38% selected for real	rticipate i de. ject. medial wo	n indi	vidual <u>3</u> 47 <u>407</u> Othe	select				t work	•	·
7.	The individual instru			13%	the st	ted by udent.		,			
	19% the library med	lia specia	list.	Othe	r:	 -	: :				
8.	The student's progre	ess is dete	ermin	ed by	stude	nr ^t e O	un Aug	luatio	ń.		
	40% standardized te	ion.	tion	onene 🍷 🧀	en e	iir a O	AU e Aq	. rua cio			

	9.	Special materials for individ	dualizec	l instru	ction ar	e prepa	ared by				
		85% teachers.			student						
		517 library media specialis 23% curriculum consultant.	st.	727. Other	comme	rcial sc	urces.				
		23/6 Cut i tediam consultant.		011.02	· •						
		ADVI GENTER CTAFE CDA	CE M	A TEDIA	IC AN	ID FOU	IDMENIT				
II.	ME 1.	DIA CENTER - STAFF, SPA How many students can your	ce, Mi	accom	odate?	Range	3-1	97.			
	2.	How many of the following a	re on th	ne medi	a cente	r staff?					
		60% full-time library media	a specia	ılist(s)			ne clerk				
		part-time library medi			1970	part-ti	me clerk ire they	:(s) shared	with ar	other	
		If so, are they shared w school?	rui ano	riier		school?	97		W I C I C I		
		resource teachers				teacher		-		-	
		637 parent (or other) volum	te e rs		4376	student	helpers				
	3.	Of the following activities, v	which ca	an go oi	n simul	taneous	ly in the	media	center	?	
		story-telling			small g			1 3 2 90,25	mal)309	2 (4	je +indiu) 9 malloindiu) 9
		large group work (clas	s)	Other	individu 	ial worl	k .3 (2 lge, in	liv) 47	o == (3)	
,		Ilbrary skill histi detio.	11	Other	• • • • • • • • • • • • • • • • • • • •		2	<u>`}+ test</u> (1g2 + te			
	4.	The following materials are	used by	y studei	nts in th	ne medi	a center	; at hor	ne		
		1		the me	edia cen			lable fo	or hom		1
			not avail-	often	occa- sion-	not at	not avail-	often	occa- sion-	not at	
	:		able	01.01.	ally	all	able		ally	all	
		Books	07.	967.	07.	0%	0%	96%	-0%	070	
		Tapes	6	53	36	ع ا	28	4	17	25	
		Disc recordings	6	47	32	2	21	11	17	30	
		Filmstrips	0	85		2	25	6	19	30	
		Filmloops	9	60	13	9	38	Ó	4	32]
	n	Transparencies	2	30	38	13	25	4	9	38	
		Programmed materials	23	23	25	13	36	2	4	34	
		Realia	25	17	25	15	38	0	6	30	<u></u>
		Models and mock-ups	30	13	21	17	45	0	6	28	
		Graphic materials (maps, graphs, diagrams)	4	34	41	6	21	11	21	28	
		Study prints and illus.	L!	55	30	6	19	17	17	2.8	
		8 mm. films	34	15	17	15	36	0	4	32	
		7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	24	11	21	19	45	0	0	20	

5. Which of the following pieces of equipment are available to students for home use?

& slide projector 237 film strip projector film loop projector 13% cassette tape recorder 47₆8 mm. projector

27.16 mm. projector
27.record player
Other: 4/0 reel-to-reel tape recorder

6. Approximately, what has been the budget for your media center?

*	1971-72	1970-71	1969-70	
Books	\$.03 - 5.00]
Reference	.09-1.20	(Range	per pupil	1971-72 budget
Periodicals	.0992	[]		,
Audio-visual equipment	.36-4.27			
Audio-visual materials	.19 -4.40	,		
•	* incl brok	uded were en down i	the budge	ts which were categories

III. MEDIA CENTER USE

To what extent is your library media center involved in the individualized instruction program in your school?

45% to a great extent

43% to some extent 13% not involved.

2. To what extent is each of the following an integral part of the media center program?

	to a great extent	to some extent	not at all
Reading guidance	62%	17%	0%
Listening and viewing guidance	57	32'	2,,′
Instruction in use of media	57	25	4
Guidance in study habits	38	43	4
Developing media skills	51	34	2_

3. The library instructional program is

taught to classes in the media center.

5776 ntegrated with other subjects and taught in the media center.

28% integrated with other subjects and taught in the classroom.

'4. Does the faculty call on you to

	often	occasionally	not at all
Consult about available resources	8370	13%	2%
Select materials	87	11	0
Inform them about student's progress as seen in media center	28	43	21
Instruct them in effective media use	32	47	1/
Aid them with materials production	43	30	2
Other:		-	



5.	771- 0		center	h
~	INE	menia	center	nas

2% all of its time formally scheduled. 23% all classes scheduled; other times flexible. 49% some classes scheduled; other times flexible.

no classes scheduled; all time flexible.

6. Individual students come to the center to work independently

1770 at all times.
1573 at all unscheduled times.

1% at specified times.

7. The following types of individualized instruction are undertaken in the library media center

	often	occasionally	not at all
Prescribed instruction	25%	25%	13%
Contract learning	4'	15	<u> </u>
Independent study	66	13	2
Programmed learning	19	21	19
Tutoring	25	47	G
Individual projects	70	. 17	0
Other:			

8. Working independently in the media center, how much help do students need in ...

	a great deal of help	some help	no help
Locating materials	1990	72%	6%
Using reference materials	30	66	4'
Using A-V material	19	55	17
Using A-V equipment	13	66	17
Developing study skills	36	57	6
Narrowing the problem	36	45-	4
Using indexes	38	53	4
Outlining	38	38	13
Acquiring research techniques.	45	40	6

9. In order to extend the individualized instruction program in your media center, it would be necessary to:

60% enlarge present facilities.
30% improve physical access.
644 increase media collection.
47% print

55% increase number of professional personnel.
55% increase number of clerical personnel.
30% improve teacher cooperation.

1701	68% a-v improve administrative
L! /0	cooperation.

Other:	 	 	 	



APPENDIX D



MEDIA CENTER BUDGETS* TABLE IA

	-		Books		RE	FERE	Feactive	PER	PERIODICAIS	7577 ASSE	A-VEguipment	Julpmer.		AV.A	IIAV Materials	215	TOTAL
		41-72	11-12/10/11/69-70	61-13	26-11-12	10.02	12.63 11.02	11-72	11-92 50-11 119-5		11-72 70-11 1970	10:11		71.72	11-72 10-71 1.9-70	1.9.70	71-72
School #		*															
(Fan-Jon		5.86	7.66	562	.42	ķ	44.	<i>t</i> +.	14.	77.	3.50	7.34	2,34	4.20	1.00	3.05	14.95
	દુર્ય	4.60	•		લ			ģ			4.60			2.1%			13.98
o de la construir de la construir	3.3	3.66	ु- <u>१</u>	7.30	.73	-83	83.	Ŧ	.37	. 32	(.53	199.)	% %	(.33	5.30	9.15	2.66
**************************************	as.	2.40	7.20	7.80	6.20	1.86	308	58	1.20	07.7				2.30	2.80	3 .80	89:9
		4.70	4,35	3.60	36	፠	36.	ę	<i>2</i> 5.	ķ			:				5.32
	Ú	3.46	7.88	7.8%	Ř	- 26	%:	.07						98	₹.	.07	4.67
	7. 7.	<u>1</u> -9	2.07	2.30	Ę	<u>5</u>	¥ .	,37	.37	.37	Ŀ	.37	76.	7.0.7	1.04	(.05	3.77
gSS,	1.0	9.7			Ę			.03						8.			4.15
	Ţ	[11]	1.32	92.1	Ž.	.39	ጽ.	.37	ķ.	দ			٤	€.	Ы	₹.	h61
e state of the	ू	77.	1.16	1.20		.05	7,7		7).	β		1 1 2 2 3 4			8.		.7"

* Note: Not all categories were completed by each responding,



MEDIA CENTERBUCETS*

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chool #																
	5.35	4.75	4.75	8/1-	23	.57							1.37	rei	1.30	7.20
ander (Car	4.27			25						2,29	**					78.9
	4.55			ક્ષ	.33	系				1.09						263
	3.90	3.55		.03	8					1001	1.25					5.70
	3.13			8			.87			(.38				•		2.47
2	4.42			36								,,	18			5.0
	3.47	5.20	4.70	<i>b)</i> 7·	×	.23		-		જ	.23	.23				4.84
AC USING	2.06			83						8.	•					321
	89.1	1.68	1.68	<u>4</u>	7.	8.				51.	.75	75				7,67
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~	12	53	er E	X	7	.15				45	53.	9				

*Note: Not all the categories were completed by each responden

MEDIA CENTER BUDGETS*

	Bks.	ct + Pen		IAN Equipment	SUIPE		N.V.	A.V Materials	ŀ	a we	med. A	7.7	Compined A.V. I ITATA
•	12.12	1	.0	91.72	16.63	91.72 mg/ 189.70	718	76-n	18	20.02	10.01	71 8 76-71 69 - 10-72 10-91 69-30	20-16
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nos.) 26	obi)	12.30	12.30 27.00	3.x0		2390		17:30	3.70				8.10
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***	32	3.21	3.00	00)	3.34	J9;6	<i>Jse</i>);}	1.55	05.)				3
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	7.6	2.96	2.94 3.29				£:	99.	8-				3.95
m .	1.69	09.1	1.60 1.60				π,	1.07	.36				\$. ₩

* Note: Not all the categories were completed by each media specialist.

TOTALLED MEDIA CENTER BUDGETS*

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""ELed	69-70		14.80	5.19		4.34	3.88	4.28		2.62	· ·	1.96			1.61	1.55	64.1	7
r (A-VE9	10.01		13.00	5.66	4.89	5.21	3.65	3,95		2.63		2.67		252	1.43	897	1.35	(1.37
เลบกระดา	71-12	18.94	89.9	5.97	5.70	5.56	4.67	3.95	3.21	2.62	2.54	2,31	2,15	1.39	1.32	.79	.7%	74
																		

 1	·																		*			
07-64	11.60			54.60	e,	55. 2O	6.69	5.96		3.05	7.77				50.82	5,22		4.15	4.43	3.45	29.	
70.71				24.60		15.76	6.69	6.70	6.35	6.40 6.70	8 5	<u> </u>			4.66	5.69	3.36	4.15	3.98	3.45	4.53	
711-72	\$16.80 14.95	8.78 8.78	8.29	8.10	7.89	7.66	7.30	6.95	6.55	6.50	} =	8	5.41	5.03	4.85	18.1∕7	4.49	3.80	3.17	3.45	7.6.	(2):1

*Note: These budgets were not completed by every media specialist