A REVIEW AND EXAMINATION OF SELECTED ASPECTS OF THE ESEA TITLE III (PACE) PROGRAM IN THE STATE OF MICHIGAN

Ву

Ray L. Boggs

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

Department of Secondary Education and Curriculum

PLEASE NOTE:

Some pages may have indistinct print.
Filmed as received.

University Microfilms, A Xerox Education Company

ABSTRACT

A REVIEW AND EXAMINATION OF SELECTED ASPECTS
OF THE ESEA TITLE III (PACE) PROGRAM
IN THE STATE OF MICHIGAN

By

Ray L. Boggs

Purpose

The purpose of this study was to review and examine selected aspects of the ESEA Title III (PACE) program in the state of Michigan. More precisely, the ESEA Title III was subject to the following treatment and consideration:

- 1. The purpose of ESEA Title III (PACE) as advanced by the Federal government was reviewed.
- Selected educational literature relating to creativity was reviewed so that a conceptual framework could be developed.
- 3. Review and summarize each project funded under the auspices of ESEA Title III (PACE) in the state of Michigan between the dates 1966 and January 1970.

- 4. Each project was reviewed so that the following could be determined:
 - a. The major focus or area of concentration of each project.
 - b. The sphere of influence of each project funded.
 - c. The distribution of each project funded according to population density.

Findings

Among the findings of the study were the following:

- 1. The ESEA Title III (PACE) projects funded in the state of Michigan between the dates 1966 and January 1970 could be grouped according to six broad categories. The categories and the total number of projects in each category were found to be as follows:
 - a. Evaluation or Assessment Projects 18
 - b. In-Service Projects 16
 - c. Pre-School Projects 6
 - d. Auxiliary Program Projects 32
 - e. Subject or Content Area Projects 24

2.	Sph	ere of influence in this study referred to
	whe	re the project would bring about improvement.
	To	determine where the project would bring about
	imp	rovement the school organization pattern was
	use	d. The ESEA Title III (PACE) projects funded
	in	the state of Michigan between the dates 1966
	and	January 1970 were granted where the sphere of
	inf	luence would include the following:
	a.	ESEA Title III projects whose sphere of influence would include those representative of combined school districts 16
	b.	ESEA Title III projects whose sphere of influence would include those representative of one school district 57
	c. ·	ESEA Title III projects whose sphere of influence would include those within one school
3.	The	distribution of ESEA Title III (PACE) projects
	acc	ording to the population of Intermediate School
	Dis	tricts were as follows:
	a.	Projects to Intermediate School Districts with s.e. of more than 100,000 38
	b.	Projects to Intermediate School Districts with s.e. of more than 50,000 17
	c.	Projects to Intermediate School Districts with s.e. of more than 25,000 20
	d.	Projects to Intermediate School Districts with s.e. of more than 10,000 23
	e.	Projects to Intermediate School Districts

ACKNOWLEDGMENTS

The writer wishes to express appreciation to his guidance committee; Troy Stearns, chairman, Alice Davis, George Myers, and Louise Sause. Working with them has been his reward.

TABLE OF CONTENTS

Chapte	r	Page
I.	THE PROBLEM AND THE PLAN FOR THE STUDY	1
	Background of the Problem	1
	Introduction to the Problem	5 6
	Purpose of the Study	6
	Methodology of the Study	7
	Limitations of the Study	8
	Significance of the Study	8
	Philosophy and Values Underlying	
	the Study	10
	Overview of this Study	13
	REVIEW OF THE ESEA TITLE III AS ADVANCED BY THE FEDERAL GOVERNMENT AND REVIEW OF LITERATURE	14
	PART I. DEVELOPMENT OF ESEA TITLE III	
	Introduction	14
	State Plans and State Advisory	19
•	National Advisory Council	22
	National Advisory Council	22
	PART II. REVIEW OF SELECTED LITERATURE ON CREATIVITY	
	Introduction	23
	Selected Statements Relating to	26
	Creativity	26
	Summary	34

Chapte	r	Page
III.	DESIGN OF THE STUDY AND PRESENTATION	
	OF DATA	37
	Projects According to Area of	
	Concentration or Major Focus	41
	Evaluation or Assessment	46
	In-Service	48
	Auxiliary Programs	49
	Pre-School	54
	Subject or Content Areas	56
	Innovative Programs for Student	
	Participation	58
_	Sphere of Influence	64
	Related Information	74
	Summary	76
	Dummary	70
IV.	SUMMARY, CONCLUSIONS, RECOMMENDATIONS	78
	Summary	78
	Conclusions About Major Focus or Area	, ,
	of Concentration	79
	Recommendations for Further Research	85
	Recommendacions for further Research	0.5
BIBLIO	GRAPHY	87
APPEND	ICES	
Append	ix	
Α.	Summary of ESEA Title III Projects	
Α.	Funded in the State of Michigan	92
В.	Student Enrollment by Intermediate	
	Districts in the State of Michigan	149

LIST OF TABLES

Table	·	Page
4.1	ESEA Title III (PACE) Projects According to Area of Concentration or Major Focus	43
4.2	ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was Evaluation or Assessment	47
4.3	ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was In-Service	50
4.4	esea Title III (PACE) Projects Whose Area of Concentration or Major Focus was that of Auxiliary Programs (Guidance, Counseling, Educational Media, Outdoor Education, Paraprofessionals, Information Centers)	52
4.5	ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was Pre-School	55
4.6	ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was a Subject or Content Area	57
4.7	ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was Innovative Programs for Student Participation	59
4.8	The Sphere of Influence of Evaluation or Assessment of ESEA Title III (PACE) Projects	65
4.9	The Sphere of Influence of In-Service ESEA Title III (PACE) Projects	66

Table		Page
4.10	The Sphere of Influence of Auxiliary Programs Funded by ESEA Title III (PACE)	68
4.11	The Sphere of Influence of the Subject or Content Area ESEA Title III (PACE) Projects	70
4.12	The Sphere of Influence of Pre-School ESEA Title III (PACE) Projects	72
4.13	The Sphere of Influence of Innovative Programs for Student Participation ESEA Title III (PACE) Projects	73
4.14	ESEA Title III (PACE) Project Distri- bution According to Population of Intermediate Districts in Michigan	7 5

CHAPTER I

THE PROBLEM AND THE PLAN FOR THE STUDY

Background of the Problem

Over the last two decades a number of economic, political, and social factors have combined to bring to the forefront of public attention the condition of underdevelopment among human beings in all parts of the world. Although the American people have become increasingly aware of the economic and social disparities which exist everywhere on the globe, nowhere are the handicaps imposed by deliberate and accidental underdevelopment of human potentialities a greater source of embarrassment and concern than in the United States in the second half of the twentieth century.

Unlike the industrializing economy of the nineteenth and early twentieth centuries, the present automating economy has little need for the talents the uneducated have to offer. Instead, there is a growing need for trained minds, educated judgments, and conceptual skills. Having arrived at a period in human history in which man is increasingly required to manage vast categories of knowledge, to identify and solve highly complicated interdisciplinary problems, and to arrive at infinitely complex concepts and judgments in order to maintain, and direct the social organization by which we live, education is needed. The quality of intellect, the adequacy of conceptual competence, and the depth of human understanding and compassion required to function successfully will be determined in large measure by the quality of education received.

While the explosion of knowledge and the technological revolution would have increased the pressure for educational change, other pressures have also been brought to bear on the nation's educational establishment. Along with the growing crisis in intellectual resources and the management of knowledge, there has been a social crisis involving civil, or more properly, human rights. A social revolution is in progress in which various segments of dispossessed members of society are demanding total and meaningful integration into the mainstream and an opportunity to share in the nation's wealth. Parallel to and pervading these changes in society is a transition in the concept of man. Man is only beginning to discover the profound meanings of the individual person; "a concept of something that was not absolute, something that was not

fixed, something that could emerge, evolve, and yet still have infinity as a goal."

It is then, a constellation of forces presently operating that account for the issue of providing quality education for all members of American society; the struggle of the disadvantaged and segregated for improvement in their life chances; society's growing demand for competence in the development of concepts and use of knowledge; and the new insights regarding individuals growing out of research.

The past decade has witnessed a revolution in the level of expectation that has been held for human beings in almost every aspect of national life. Answers have come in countless ways; ways to reexamine accomplishments in technology, ways to retrieve from underdevelopment many human resources.

Educators have been called upon to assume many new responsibilities in this revolution. Research, subsidized by federal funds, has helped in understanding the needs of the mentally retarded and the gifted. Such research has been followed by an amazing growth of concern for underdevelopment in other groups: in the bright but underachieving, in bilingual communities, in segregated

Harold Anderson, ed., <u>Creativity and Its Cultivation</u> (New York: Harper and Brothers, 1959). (Hereinafter referred to as Anderson, <u>Creativity</u>)

situations, in the urban schools and for rural or disadvantaged areas of America. Continuing concern has taken many turns, at each of which new shades of meaning have been incorporated in the vocabularies that have been invented or borrowed from relevant fields of knowledge. Adjustment, getting along with others, self and significant others, roles and life styles, self understanding, the self concept; these are familiar terms that mark efforts to move ahead in identifying better ways of promoting healthy personal development. Examples of interest in the effective functioning of persons in group settings and varied emphases in intergroup relationships could also be cited.

In January 1965, the President of the United States, Lyndon Johnson, closed his educational message to Congress with these words:

We are now embarked on another venture to put the American dream to work in meeting the demands of a new day. Once again, we must start where men who would improve their society have always known they must begin . . . with an educational system restudied, reinforced and revitalized.

Education now has a unanimous vote. There seems to be no disagreement with the notion that economic and social development is a function of the content of men's minds. It seems almost too easy to accept the idea that education can solve the problems of literacy, poverty, production, economic development and the maldistribution of affluence.

Education has thus become the urgent agenda of a world society as well as the world's forum of peace.

responsibilities. One of these responsibilities that needs to be assumed and one that will require restudying, reinforcing, is that of reassessing the conception of human potentialities and that of trying to imagine and implement better conditions for its fuller development.

The point to be made here is that the need is not to abandon the understandings that research has won; rather the need is to complement these with new insights and a perspective that will enlarge the conception of human potentialities.

Introduction to the Problem

Education has been called upon to assume responsibilities in designing and implementing better ways which will allow fuller development of human potentialities. A precedent was established in 1965 by the Elementary and Secondary Education Act of the United States. Never before in the history of the United States had the Federal government made such a single commitment for the improvement of the nation's secondary and elementary schools. The Elementary and Secondary Act was a composite of six types of educational support. The six areas of support were identified by a specific title. One of the six titles which this

study investigates is Title III, known as PACE (Projects to Advance Creativity in Education). In part, Title III (PACE) was for:

The establishment, maintenance, and operation of programs, including the lease or construction of necessary facilities and the acquisition of necessary equipment, designed to enrich the programs of local elementary and secondary schools and to offer a diverse range of educational experiences to persons of varying talents and needs by providing supplementary educational services and activities.²

As indicated, Title III (PACE) made possible the opportunity for schools to implement better ways which would enrich the programs of local elementary and secondary schools. Educators were now called upon to assume a new responsibility; the responsibility of designing and implementing programs of a nature that traditionally they had not had the opportunity to assume.

Purpose of the Study

The purpose of this study is to review and examine selected aspects of the ESEA Title III (PACE) program in the state of Michigan.

More precisely, the ESEA Title III will be subject to the following treatment and consideration:

 Review the purpose of ESEA Title III (PACE) as advanced by the Federal government.

U.S., Congress, House, An Act to Strengthen and Improve Educational Quality and Educational Opportunities in the Nation's Elementary and Secondary Schools, Pub. L. 89-10, 89th Cong., 1965, H.R. 2362, p. 15. (Hereinafter referred to as U.S., Congress, Nation's Elementary and Secondary Schools, Pub. L. 89-10)

- Review selected educational literature relating to creativity so that a conceptual framework can be developed.
- 3. Review and summarize each project funded under the auspices of ESEA Title III (PACE) in the State of Michigan between the dates 1966 and January 1970.
- 4. Review each project so that the following can be determined:
 - The major focus or area of concentration of each project.
 - b. The sphere of influence of each project funded.
 - c. The distribution of each project funded according to population density.

Methodology of the Study

This study is descriptive in nature. The writer will study the purposes of ESEA Title III (PACE) from government records and documents. The major focus or area of concentration of each project funded as stated in its initial proposal or abstracts will be reviewed from the records in the ESEA Title III office of the Department of Education in the state of Michigan.

Statements advanced by educational leaders regarding the above purposes will be obtained from a review of current educational literature.

Limitations of the Study

The limitations of this study include:

- The major focus or area of concentration of each project funded is determined from their stated proposal or abstract.
- This study does not concern itself with implementation, final outcome, or evaluation.
- 3. That certain restrictions are imposed upon any effort to operationalize definitions as they relate to human beings. To verify those conditions and factors that can be accepted as valid elements in human behavior is no less true of the efforts of this study.
- 4. That the review of the educational literature is subject to bias based on the author's persuasion toward education. Any resolution of contrasting views can be resolved only through a careful analysis involving, not only psychological-social concerns, but also philosophical deliberations.

Significance of the Study

As a result of the Federal government's appropriating financial assistance to public schools for use in a specified manner two issues which this study indirectly investigates, emerge. They are:

- 1. Given financial support designated for a specific area of concentration in public schools; is the area of concentration in agreement with the findings of educational leaders?
- 2. Given financial support designated for a specific area of concentration in public schools; are the programs funded for implementation at the local level in agreement with the initial purpose of the appropriations?

The distinction should be made here that the issue of financial intervention by the Federal government is not the issue. The concern rather is that given a framework of creativity, what is the nature of those projects funded? For a Federal program that has as its aim that of advancing creativity, what is the major focus of those projects funded?

It is felt that this study, by providing an analytical study of one of several Federally funded programs, greater understanding and clarity of purpose for those who have the responsibility for curriculum development and instructional improvement in our schools can be provided.

This study should be useful to the curriculum workers at the state level, and to administrators and teachers for several reasons. First, the concepts studied do not deal with a particular content area, a specific

method or technique but rather, the concepts studied pervade any approach that may be taken to bring about improvement. Second, a study of those processes that are uniquely human should provide a basis for decision making. Third, by focusing attention upon the issues stated and concepts studied, one should be led to greater interest and further study in assessing the effects of schools on behalf of their clientele.

Philosophy and Values Underlying the Study

Of all forms of social organization, only democracy, theoretically and practically, offers the greatest good to the greatest number. Schools are designed to support this in as deliberate a way as possible by providing equality of educational opportunity to every person. The motivating force here is faith in the dignity and worth of human beings. The practical task is to offer every person a place in a schoolroom that has a program which will assure his fullest development.

Each time the school provides the conditions of optimum growth for any individual, it becomes possible for him, deeply conscious of his own worth, to make a positive contribution to the growth of others. In the resulting individual-group relationship, the freedom to find and enjoy success as a learner helps the individual and the group to accept the obligation to maintain

As individuals and groups learn how to make success bring about more success, they make it possible for growth to become a continuing process. When an individual can behave in this way, his knowledge and his actions enhance his self-understanding, his understanding of others, and his commitment to avoid any violation of freedom for himself or others.

There can be no faith in individual dignity and worth serious enough to make a society offer equality of opportunity in its schools without knowledge of how and why men behave as they do. The task of the democrat, in this instance, is to apply the methods of intelligence to the study of his own nature, and to accept and use all that he learns about himself and others.

Where knowledge and the method of intelligence are lacking, John Gardner said the consequences are all too familiar: the deterioration of standards, the debasement of taste, shoddy education, vulgar art, cheap politics and the tyranny of the lowest common denominator,

Where blind and naked Ignorance Delivers brawling judgments, unashamed, On all things all day long.

³John Gardner, Excellence: Can We Be Equal and Excellent Too? (New York: Harper and Row, 1961), p. 73, citing Alfred Lord Tennyson's Idylls of the King.

The democratic ethos provides a rationale for all the activities of the members of society. When the ethos is understood, the value system of the society is made clear. Moral-ethical values and spiritual values, as integral parts of the value system, are deeply rooted convictions that strengthen all other values. Values, as an important part of social heritage, help men to think and act in ways that tie the present to the past and, in providing a sense of history, strengthen the ethos of the society. For this reason, when values are subverted, the social fabric is weakened.

There is considerable agreement today that citizens must be more knowledgeable than ever before, and that values must deal effectively with present issues even as they serve as a basis for future actions. Educators, in theory if not in practice, are held responsible for those values that will enable children to deal with everyday affairs in a democratically consistent manner.

Democracy works when each citizen, acting as an individual and as a member of various groups, understands what knowledge is of most worth and struggles to live by it. This behavior places a premium upon many skills and abilities. The citizen must be able to use all available pertinent data in defining issues. He must be able to design and apply solutions, to appraise the results obtained, and to derive new ideas from what he has done.

When this happens, both individual and group living are enriched and enhanced. A humanitarian frame of reference and the skilled use of related and relevant knowledge are basic to such action.

Overview of this Study

Chapter I presents a background to the problem under investigation and the purpose of the study. The significance of the study, procedures used to investigate the problem and the limitations of the study are given. The chapter closes with a philosophy underlying the study and an overview of the study.

Chapter II is divided into two sections:

- Part I: Reviews and traces the development of ESEA Title III as advanced by the Federal Government.
- Part II: Reviews selected authors in the educational literature relating to creativity so that a conceptual framework can be developed.

Chapter III describes the design of the study and the procedures used for gathering information relating to the study and presents an examination of the projects funded under the auspices of ESEA Title III (PACE).

Chapter IV summarizes the study and makes recommendations for further studies.

CHAPTER II

REVIEW OF THE ESEA TITLE III AS ADVANCED BY THE FEDERAL GOVERNMENT AND REVIEW OF LITERATURE

This chapter will be divided into two parts. Part I will trace the development of the ESEA Title III (PACE) from its inception into public law, April 11, 1965, to its interpretation for implementation in the state of Michigan. Part II of this chapter will be a presentation of selected statements advanced by educational authorities regarding creativity.

PART I. DEVELOPMENT OF ESEA TITLE III

Introduction

April 11, 1965, Public Law 89-10 was enacted by the United States Congress "to strengthen and improve educational quality and educational opportunity in the Nation's elementary and secondary schools." This act was to become known as, "Elementary and Secondary Act of 1965."

U.S., Congress, Nation's Elementary and Secondary Schools, Pub. L. 89-10, p. 1.

The ESEA Act was a composite of six types of educational support identified by a specific title:

- Title I: Financial Assistance for Local Educational Agencies in Areas Affected by Federal Activity.
- Title II: Financial Assistance to Local Educational Agencies for the Education of Children of Low-Income Families.
- Title III: Supplementary Educational Centers and Services.
- Title IV: Educational Research and Training.
- Title V: Grants to Strengthen State Departments of Education.
- Title VI: General Provisions.

As noted above Title III is part of a new law, the Elementary and Secondary Education Act of 1965, which represents the greatest single commitment ever made by the Federal government for the improvement of elementary and secondary education. This program known as PACE (Projects to Advance Creativity in Education) was designed to "... help local school districts enrich the curriculum through the establishment of supplementary centers and services which would bring together sound learning opportunities for all ages."

The appropriations authorized, the uses of Federal funds, and the conditions for approval of grants will be stated as recorded in PL 89-10.

⁵U.S., Department of Health, Education, and Welfare, PACE [Projects to Advance Creativity in Education, Title III of the Elementary and Secondary Education Act of 1965]. (Washington, D.C.: Government Printing Office, 1966), p. 3.

Appropriations Authorized:

The Commissioner shall carry out during the fiscal year ending June 30, 1966, and each of the four succeeding fiscal years, a program for making grants for supplementary educational centers and services, to stimulate and assist in the provision of vitally needed educational services not available in sufficient quantity or quality, and to stimulate and assist in the development and establishment of exemplary elementary and secondary school educational programs to serve as models for regular school programs.

Applications for Grants and Conditions for Approval:

A grant under this title for a program of supplementary educational services may be made to a local educational agency or agencies, but only if there is satisfactory assurance that in the planning of that program there has been, and in the establishing and carrying out of that program there will be, participation of persons broadly representative of the cultural and educational resources of the area to be For the purposes of this section, the term 'cultural and educational resources' includes State educational agencies, institutions of higher education, nonprofit private schools, public and nonprofit private agencies such as libraries, museums, musical and artistic organizations, educational radio and television, and other cultural and educational resources. Such grants may be made only upon application to the Commissioner at such time or times, in such manner, and containing or accompanied by such information as the Commissioner deems necessary.

November 3, 1966, an amendment to the ESEA Act of 1965 was enacted into law and became known as Public Law 89-750. The effect of the amendment regarding Title III is:

1. A revision included provisions made for Indian children in schools operated by the Department of the Interior.

⁶U.S., Congress, Nation's Elementary and Secondary Schools, Pub. L. 89-10, p. 13.

⁷<u>Ibid.</u>, pp. 15-16.

2. Provision was made for the elimination of matching requirement by the Federal government.

January 6, 1968, an amendment to the ESEA Act of 1965 was enacted into law and became known as Public Law 90-247. The effect of the amendment regarding Title III follows:

Uses of Federal Funds:

Grants under this title may be used, in accordance with applications approved for:

- (a) planning for and taking other steps leading to the development of programs designed to provide supplementary educational activities and services described in paragraph (b) below, including pilot projects designed to test the effectiveness of plans so developed; and
- (b) the establishment, maintenance, and operation of programs, including the lease or construction of necessary facilities and the acquisition of necessary equipment, designed to enrich the programs of local elementary and secondary schools and to offer a diverse range of educational experience to persons of varying talents and needs by providing supplementary educational services and activities such as--
 - (1) comprehensive guidance and counseling, remedial instruction and school health, physical education, recreation, psychological and social work services designed to enable and encourage persons to enter, remain in, or reenter educational programs, including the provision of special educational programs and study areas during periods when schools are not regularly in session;
 - (2) comprehensive academic services and, where appropriate vocational guidance and counseling, for continuing adult education;
 - (3) developing and conducting exemplary educational programs, including dual-enrollment programs, for the purpose of stimulating the adoption of improved or new educational programs;

⁸U.S., Congress, House, An Act to Strengthen and Improve Programs of Assistance for Elementary and Secondary Schools, and for Other Purposes, Pub. L. 89-750, 89th Cong., 1966, H.R. 13161, pp. 11-12.

- (4) specialized instruction and equipment for students interested in studying advanced scientific subjects, foreign languages, and other academic subjects which are not taught in the local schools or which can be provided more effectively on a centralized basis, or for persons who are handicapped or of preschool age;
- (5) making available modern educational equipment and specially qualified personnel, including artists and musicians, on a temporary basis to public and other nonprofit schools, organizations, and institutions;
- (6) developing, producing, and transmitting radio and television programs for classroom and other educational use;
- (7) providing special educational and related services for persons who are in or from rural areas or who are or have been otherwise isolated from normal educational opportunities, including, where appropriate, the provision of mobile educational services and equipment, special home study courses, radio, television, and related forms of instruction, and visiting teachers' programs; and
- (8) other specially designed educational programs which meet the purposes of this title.

Under the original Elementary and Secondary Education Act, Title III grants were made to local districts by the United States Commissioner of Education after the local agency had submitted its plans to the State Department of Education and the United States Office of Education for review.

The amendment of 1968 shifted the control of Title III funds to the State Agencies, called for state plans for Title III. Other policies on allotments remained,

⁹U.S., Congress, Nation's Elementary and Secondary Schools, Pub. L. 89-10, pp. 14-15.

but several of the amendments detail new policies for allotments:

- 1. Besides the authorization, the Act now allows for additional sums necessary for the expenses of the administration of state plans, the activities of advisory councils, and evaluation and dissemination of activities.
- 2. An additional 3 percent of the total appropriation may be alloted by the Commissioner to Puerto Rico, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands.
- 3. In fiscal years 1968 and 1969, the Commissioner may also allot funds as needed to the Secretary of the Interior for programs in the Bureau of Indian Affairs schools and to the Secretary of Defense for Department of Defense overseas dependents schools.
- 4. Funds are to be allotted among the states on the basis of population and of children ages 5 through 17, after each state first is allotted \$200,000.
- 5. If a grant is made to a local school district according to a state plan (a new policy explained on following pages) it must satisfy one particular standard. There must be satisfactory assurance that in the planning and carrying out of the program there will be participation of persons broadly representative of the cultural and educational resources of the area to be served.
- 6. Under the state plans, no less than 15 percent of all Title III funds are to be used to provide supplementary centers and services for the education of handicapped children.
- 7. No less than 50 percent of the funds a state receives (under the state plan) must be used for planning and development of supplementary educational activities and establishment of expansion of exemplary and innovative educational programs.

State Plans and State Advisory

The amendments make clear the steps necessary for preparing a state plan that will meet with the approval of

¹⁰U.S., Congress, House, An Act to Strengthen, Improve, and Extend Programs of Assistance for Elementary and Secondary Education, and for Other Purposes, Pub. L. 90-247, 90th Cong., 1968, H.R. 7819, pp. 7-12.

the United States Office of Education. First, the state education agency must establish, within the agency, a state advisory council. The State Advisory Council shall:

(A) be appointed by the State educational agency, and be broadly representative of the cultural and educational resources of the State and of the public, including persons representative of

(i) elementary and secondary schools,

- (ii) institutions of higher education, and
- (iii) areas of professional competence in dealing with children needing special education because of physical or mental handicaps;
- (B) advise the State educational agency on the preparation of and policy matters arising in the administration of, the State plan, including the development of criteria for approval of applications under such State plan;
- (C) review, and make recommendations to the State educational agency on the action to be taken with respect to each application for a grant under the State plan;
- (D) evaluate programs and projects assisted under this title;
- (E) prepare and submit through the State educational agency a report of its activities, recommendations, and evaluations, together with such additional comments as the State educational agency deems appropriate, to the Commissioner and to the National Advisory Council, established pursuant to this title, at such times, in such form, and in such detail, as the Secretary may prescribe; and
- (F) obtain such professional, technical, and clerical assistance as may be necessary to carry out its functions under this title. 11

Secondly, the state must set dates for local school districts to submit applications for grants to the state agency, and, finally, the state must submit the plan to the United States Commissioner of Education (the

¹¹ Ibid., p. 11.

Commissioner may set uniform dates for the submission of state plans and applications). The state plans are to include:

- (1) A program in which the funds will be spent solely for the improvement of education locally (including educational needs, and their basis, and the manner in which the funds paid to the state under Title III will be used to meet these educational needs).
- (2) Criteria for achieving an equitable distribution of assistance, taking into consideration size and population, geographic distribution and density of population, and relative need of persons in different areas and groups. Special consideration is to be given to local districts which are making a reasonable tax effort but which are still unable to meet critical educational needs, including preschool and bilingual education, because the schools are overcrowded, obsolete, or unsafe.
- (3) Adoption of effective procedures for evaluation of programs and dissemination of information by the state advisory council. 12

The state agency also will not take final action on an application without first giving the local school district reasonable notice and an opportunity for a hearing.

For the first year (fiscal 1969, beginning July 1, 1968), the Commissioner may approve only that part of a state plan which is in substantial compliance with the law, making available the necessary portion of the state's allotment. However, this allotment must not be less than 50 percent of the amount for which the state is eligible.

¹²Ibid., pp. 11-12.

The rest of the amount may become available to the state if the unapproved portion of the state plan is brought into compliance with the law.

A state which has an approved state plan may receive 75 percent of its allotment in fiscal year 1969 and an equal percentage in fiscal year 1970. It also may receive the amount not used by the Commissioner for continuation of special programs and projects begun before fiscal 1969.

National Advisory Council

Another amendment to Title III provides for the National Advisory Council. The President shall appoint a 12 member National Advisory Council on Supplementary Centers and Services which shall:

- (1) review the administration of, general regulations for, and operation of this title, including its effectiveness in meeting the purposes set forth;
- (2) review, evaluate, and transmit to the Congress and the President the reports submitted pursuant to section (E of State Advisory);
- (3) evaluate programs and projects carried out under this title and disseminate the results;
- (4) make recommendations for the improvement of this title, and its administration and operation. 13

^{13&}lt;u>Ibid.</u>, pp. 15-16.

PART II. REVIEW OF SELECTED LITERATURE ON CREATIVITY

Introduction

The state of education at the present time has been described as both confused and confusing. Education has always had its critics; however, in recent years and months, criticisms of education have been intensified. All types of interest groups have entered the area of education for all types of reasons. Very often the entrance has been based on fear; fear of war, fear of defeat by rival power and more recently fear of the annihilation of civilization. Such fears have led in turn to an almost frantic concern to locate and utilize the intellectual talents of youth as a defense against the approaching perils. Much money and effort are being spent on programs to identify talented students, to counsel with them, to revise their academic programs and to provide them with assistance.

The concern about wastage of talent from the standpoint of national security is a strong one and undoubtedly necessary. However, there is another argument more compelling. When an individual does not utilize his

ability to the full extent of his capacity, it is not only a loss to society, but also a personal frustration. Human beings are not natively inert and inactive. They have drives and needs on the one hand, and on the other, certain strengths and abilities. When these abilities are utilized, there is satisfaction and personal fulfillment. Without satisfaction and personal fulfillment, there is frustration and unhappiness. With frustration and unhappiness, the attendant is destruction. With drives, needs, strengths and abilities utilized there is the promise of continued growth and fulfillment. Thus it is of strategic importance and there are legitimate reasons why educators should be concerned about assessing and guiding the growth of creative abilities.

Current views on the nature of creativity differ widely and cannot easily be separated from views on intelligence and intelligence testing, assessment of special aptitudes and abilities, learning theories, personality theories, psychological thinking or the broader question concerning the nature of man.

There is yet no unified theory of creativity. But despite the fact the concept of creativity is so amorphous, it is highly useful. Its present lack of preciseness need not preclude it from proving valuable as an educational concern. The immaturity of research in this field is due

partly to the novelty of concentrated empirical investigation and this in turn is due to the difficulty of studying such a high-level phenomenon.

An increasing specialization in various aspects of psychology has led to departmentalization of study and often to an unduly exclusive concentration on relatively narrow problems. Research regarding creativity has become particularly important since it has tended to draw ideas from several fields. In so doing, "It has punched some holes in the water-tight compartments that have been thrown up between cognitive and non-cognitive theories of personality." 14

While it is true that most of the research reported in the current literature has been conducted by psychologists and educationalists using experimental and statistical methods, one studying the subject of creativity becomes aware of the value of different approaches and methods.

As mentioned previously, creativity is a highlevel phenomenon, consequently the quest for certainty should not pre-empt or hasten closure when acceptance of the uncertainty may be more judicious.

James Freeman, T. Christie, and H. J. Butler, Creativity (London: Society for Research into Higher Education, 1968), p. 2.

Selected Statements Relating to Creativity

The selected statements of experts whose concern for growth of human beings is based on a broad view of the phenomenon of creativity is presented.

When speaking of creativity, Carl Rogers said; "It is the emergence in action of a novel relational product, growing out of the uniqueness of the individual on the one hand, and the materials, events, people, or circumstances of his life on the other."

Rogers appended some negative footnotes on his definition by the following statement:

It makes no distinction between 'good' and 'bad' creativity. One man may be discovering a way of relieving pain, whereas another is devising a new and more subtle form of torture for political prisoners. . . We do not want to cloud our definition with terms which rest in subjectivity. 16

Rogers further stated that his definition made no distinction regarding the degree of creativity, since, degree is a value judgment variable in nature. "The action of the child inventing a new game with his playmates; Einstein formulating a theory of relativity; the housewife devising a new sauce for the meat; a young author writing his first

¹⁵Carl Rogers, "Toward A Theory of Creativity," A Review of General Semantics, 11 (Summer, 1954), p. 249.

¹⁶Ibid., pp. 249-260.

novel; all of these are creative and there is no attempt to set them in some order of more or less creative." 17

Rollo May said: "Creativity is the encounter of the intensively conscious human being with his world." ¹⁸ May clarified his meaning by defining creativity as the process of

bringing something new into birth . . . which involves an 'encounter' of the acting person with his world [World is the pattern of meaningful relations in which the person exists and in the design of which he participates. World is interrelated to the existing person at every moment.] with intensity.19

When speaking of creativity Eric Fromm placed importance on the act of responding. "Creativity is the ability to see (or to be aware) and to respond." Fromm further stated,

I respond to the person as he is; to the experience of the other person as it is. I respond not with my brain or my eyes or my ears. I respond as the whole person I am. When I respond to an object with the real powers in me, which are fitted to respond to it, the object ceases to be an object. I become one with it. This kind of response occurs in a situation of complete relatedness . . . although at the same time they remain two.²⁰

^{17&}lt;sub>Ibid</sub>.

Rollo May, "The Nature of Creativity," Creativity and Its Cultivation, ed. by Harold H. Anderson (New York: Harper and Bros., 1959), p. 68.

¹⁹ Ibid.

²⁰ Eric Fromm, "The Creativity Attitude," Creativity and Its Cultivation, ed. by Harold H. Anderson (New York: Harper and Bros., 1959), p. 44. (Hereinafter referred to as Fromm, "The Creativity Attitude," Creativity, ed. by Harold H. Anderson)

Abraham Maslow approached creativity neither as a component apart from a person nor as a product-making or problem solving quality but rather "self-actualizing creativeness . . . as synonymous with health itself." He further stated: " . . . since self-actualization or health must ultimately be defined as the coming to pass of the fullest humanness, or as the "Being" of the person, it is as if self-actualizing creativity were almost synonymous with . . . essential humanness." 21

Gardner Murphy devoted extensive study to the question of how to conceive of human potentialities. He saw potentialities emerging out of three kinds of human nature, and he also described them in terms of fields of developing human potentialities. As for the discovery of individual potentialities, he saw this in three directions: in progressive development, specifically of creativity; in active effort at self-fulfillment which would include both the relationships with and understanding of people as well as the mastery of chosen jobs; finally in what he called inner self-realization, which he defined as a "sensitive, flexible, creative, self-fulfilling deployment of perception, feeling and impulse," with each

Abraham Maslow, "Creativity in Self-Actualizing People," Creativity and Its Cultivation, ed. by Harold H. Anderson (New York: Harper & Bros., 1959), pp. 83-94.

activity and satisfaction being an "aspect of a larger activity--a phase of a plan, a phase of a life." 22

Murphy said there is general agreement that acts of creativeness, great or small, arise in a context typically involving four phases:

- l. There is a long immersion of the sensitive mind in some specific medium which gives delight and fulfillment whether it be the world of color, tone, movement, space, time, the world of force and organization, the world of words, of images, of social relationships, or the world of contemplation or of mastery.
- 2. The second phase in creativeness appears when this sensitivity leads to the acquisition of storehouses full of experiences which consolidate themselves into 'higher units.' However, Murphy said; 'since all these things cannot be kept in consciousness at a single moment, they are organized unconsciously into systems upon which one may draw as he needs them; a living storehouse of ready, yet adaptable and flexible, information and experiences.'
- 3. The third phase derives from the second phase which is based 'upon years of accumulation and incubation' . . . 'this phase is the inspiration or illumination phase.'
- 4. The fourth step which always emerges in the process of creating is the 'hammering-out' or the critical evaluation and perfecting of the work done. 23

Brewster Ghiselin in his book The Creative Process spoke of creativity as being a never ending process when he said: "The creative process is the process of change, of development, of evolution, in the organization of subjective life." He further stated that creation began with

Gardner Murphy, "Human Life Patterns and Potentialities," <u>Exploration of Human Potentialities</u>, cited by Charlotte Buhler (Springfield, Ill.: Charles C. Thomas Publishers, 1966), p. 21.

²³Gardner Murphy, <u>Human Potentialities</u> (New York: Basic Books, 1958), pp. 129-131.

a "vague even a confused excitement. . ." He further noted that " . . . production by a process of purely conscious calculation seemed never to occur." He concluded with the following statement" "The creative process is not only the concern of the specialists; it is not limited to the arts and to thought, but is as wide as life." 24

A note of caution attending the creative process is exemplified by the following statement:

The less the worker needs to depend on external things or circumstances the safer he is from disturbances and disabling accidents. The man who comes to depend on alcohol, or on paper of a specific size, or on some one favored environment in order to get his work done has narrowed his freedom of action and he may be resorting to automatic controls or to magic instead of relying on his skill, ingenuity, and sensitiveness. 25 Cultivation of the central discipline is needed.

E. Paul Torrance and others have made a contribution in the area of creativity by experimental procedures. Rather than concentrate primarily on one aspect of creativity Torrance said: "It seems inevitable to me that a thorough understanding of creativity must involve the study of all aspects of creativity (person, process, product, press)." He further described creative thinking as

²⁴Brewster Ghiselin, The Creative Process (Berkeley: University of California Press, 1954), pp. 5-13.

^{25 &}lt;u>Ibid.</u>, p. 15.

²⁶ E. Paul Torrance, Rewarding Creative Behavior (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965), p. 8.

"taking place in the process of sensing difficulties, problems, gaps in information, missing elements; making guesses or formulating hypothesis about these deficiencies; testing these guesses and possibly revising and retesting them; and finally in communicating the results." He further stated that "strong human needs appear to be at the basis of each of its stages." Concerning his detailed experimental procedures regarding creativity Torrance hastened to add that his intent was "not to replace existing 'specialized inquiry' but to remove it from its position of dominance over all higher education."

A careful study of the writings of Getzel and Jackson and Torrance indicated that by relating creativity to personality development and to learning theory, they gave the word "creativity" new meanings. Through the ages, "creativity" was a term applied to the exotic, the esoteric and the magnificent products of man's genius. 29

Arthur Combs used the term creativity synonymously with <u>adequacy</u> and stated that "There is a capacity for creativeness in every person." Rather than a precise definition of creativity, Combs described <u>adequate</u> in terms of characteristic ways an adequate person saw himself and

^{27&}lt;sub>Ibid.</sub>, p. 9.

²⁸E. Paul Torrance, "Scientific View of Creativity," <u>Daedalus</u>, 94 (Summer, 1964), pp. 663-681.

²⁹J. W. Getzel and P. M. Jackson, <u>Creativity and</u> Intelligence (New York: Wiley, 1962).

the world. Four characteristics of the perceptual field which seemed to underlie the behavior of truly adequate persons are:

- 1. positive view of self
- 2. identification with others
- 3. openness to experience and acceptance 30
- 4. a rich and available perceptual field

Summarizing statements by Rogers, Kelly, and Maslow, Combs said that:

creativity is a product of:

- 1. rich experiences
- 2. trust in self
- 3. openness to data
- 4. attitudes that value change
- 5. freedom from threat
- 6. willingness to be and to become 31

The statements previously presented concerning conditions or ways in which creativity reveals itself are in agreement with other writers previously cited. For example, "openness" is reflected in several ways. When Rollo May spoke of "encounter" he said that it:

. . . involves acting as a total person, with subconscious and unconscious levels in personality acting in some form of unity with conscious levels. It is not <u>irrational</u>; it rather is suprarational. It brings intellectual, volitional, and <u>emotional</u> functions into play all together.³²

³⁰ Arthur Combs, ed., "Perceiving, Behaving, Becoming," 1962 Yearbook (Washington, D.C.: Association for Supervision and Curriculum Development, 1962), p. 51. (Hereinafter referred to as Combs, ed., "Perceiving, Behaving, Becoming," 1962 Yearbook)

^{31 &}lt;u>Ibid</u>., p. 144.

³² Anderson, Creativity, p. 64.

Eric Fromm referred to openness as the "willing-ness to be born every day." This means the "willingness to let go of all certainties and illusions requires courage and faith." 33

Carl Rogers called the condition of "openness" the condition of "extensionality." To further clarify extensionality he said it is "lack of rigidity and permeability of boundaries in concepts, beliefs, perceptions, and hypotheses . . . a tolerance for ambiguity . . . and ability to receive much conflicting information without forcing closure upon the situation." 34

Gail Inlow said that an "open encounter" with life has a built-in attribute in the trait of <u>curiosity</u> before the unknown. "The creative person is one who is curious in the face of the unknown and agnostic before the alleged known, and he projects his agnostic posture across life's total range." 35

To the writer of this study it would follow from what has been said about openness and curiosity that for a person to be "creative" a reservoir of experiences is requisite. To this point Combs said: "One must certainly

³³ Fromm, "The Creativity Attitude," Creativity, ed. by Harold H. Anderson, p. 53.

³⁴ Carl Rogers, Creativity and Its Cultivation, ed. by Harold H. Anderson (New York: Harper & Bros., 1959), p. 75.

³⁵Gail Inlow, The Emergent in Curriculum (New York: John Wiley & Sons, 1966), p. 74.

have a field of perceptions, rich and extensive enough to provide understanding of the events in which he is enmeshed and available when he needs them." Earl Kelly spoke to the same point when he said: "The psychological self feeds on ideas, which come from other people." Carl Rogers qualified openness or "extensionality" with regard to available data. The experience is open to the degree one has "access to all of the available data."

Summary

What is entailed by this basic notion of creativity can now be summarized. There are four essential elements involved. The first is a material which has an identity, a structure, a limit of its own, and which, therefore, entails a discipline for the creator in his treatment of the material. The second element is the observor or investigator who proceeds toward resolution of a problem which he sees, often only vaquely, in the material. This is a problem that involves him. He then proceeds through discipline and control toward the solution of his problem. It is important to note here that the original problem is sometimes transformed into another, and therefore the solution to the problem is often unanticipated at the beginning of the creative process. A third element in the creative process is "coming to grips"

Combs, ed., "Perceiving, Behaving, Becoming," 1962 Yearbook, p. 181.

with the material and an unresolved problem. This would consist of a recognition of meaning in the material. The fourth element in the process of creativity is the manifestation of the resolution in some form.

The elements mentioned above can neither be clearly recognizable nor can they be successive and distinct from one another. A total pattern of behavior is involved in which the various elements overlap and interweave from the start of the activity until the realization of the final form. The total act of creating is not one cycle of these four elements but rather many cycles in ever changing emphases. The arrangement of the elements and the pattern which evolves is dependent on the individuality of each person. The merging of one person and the elements mentioned, or as Rollo May said, "the encounter," has a wide range of resolutions. At the one extreme the creative act may be simple problem-solving. Margaret Mead said in part:

To the extent that a person makes, invents, thinks of something that is new to him, he may be said to have performed a creative act. From this point of view the child who rediscovers in the twentieth century that the sum of the square of the hypotenuse of a right angle triangle equals the sum of the squares of the two other sides 37 is performing as creative an act as did Archimedes.

³⁷ Margaret Mead, "Creativity in Cross-Cultural Perspective," Creativity and Its Cultivation, ed. by Harold H. Anderson (New York: Harper and Bros., 1959), pp. 222-223.

At the other extreme creativity may involve a great deal of originality. It is always, however, more than a mere exercise of the intellect. It is the absorption of the total person in the problem, and it is accompanied by an experience which is satisfying to the creator from the inception of the process to the resolution in some form.

It is evident that there is <u>agreement</u> among the authors cited regarding the creative person, the creative process and creativity, even though the frames of references from which they view creativity may be different. Creativity as a function of growth is noted. Two basic premises emerge, which are:

- Creativity is necessary for a fully adequate personality.
- 2. Every person has the capacity for creativity.

From these two premises a fundamental purpose for education can be derived; namely, providing conditions that will allow creativity to reveal itself.

Included in the following chapter will be a presentation of projects which were funded in the state of Michigan under the auspices of a Federal program--ESEA Title III (PACE). ESEA Title III (PACE) had creativity as a framework through which projects would be funded.

CHAPTER III

DESIGN OF THE STUDY AND PRESENTATION OF DATA

The methodology used in this study is descriptive in nature. The writer of this study will review the purposes of ESEA Title III (PACE) from government records and documents. The purpose of each program funded as stated in the initial proposal and summaries of each project will be gathered from the records in the ESEA Title III office of the Department of Education for the state of Michigan.

By employing the research technique of content analysis, the description of each project funded in the state of Michigan will be presented. The examination is confined to the written communications relating to each project. Tables will be used to facilitate analysis. Content fitting various categories covered by the examination will be recorded by frequency of occurrence. The categories used in the examination will be determined only from what is stated in the written communications relating to each project funded.

A review and examination of selected aspects of the Elementary and Secondary Education Act Title III (PACE) from 1965 through and including January 1, 1970 will be presented in this chapter. This study investigates those projects that have been funded under the auspices of Title III so that impressions as they relate to Title III will be accompanied by more substantial findings than have heretofore been available. Title III projects that have been funded in Michigan will be subject to treatment and consideration as mentioned in Chapter I. Each project will be examined so that the major focus or area of concentration can be determined. In other words, each project was funded in the hopes that a certain type of improvement could take place in the nation's public schools. After a careful examination of the written communication relating to each project, what was the nature of improvement that each project intended to bring about? While each project will be examined as to major focus or area of concentration, another dimension will receive consideration; namely, the sphere of influence which the project was to entail. Many of the projects were concerned with assessment, several related to in-service education and several projects were concerned with services such as student personnel, audio-visual aids and guidance or counseling. could be said that the major focus of several projects are determined, an understanding of the sphere of influence of

any one project is unknown. Is the assessment primarily for one school? Is the evaluation project for a whole school district or for use by all the school districts within an Intermediate School District? By employing the school organization patterns (explained later in this chapter) as a demarcation for the sphere of influence, greater clarity of each project would be rendered.

Another consideration of the projects will receive attention. A distribution of the projects according to the student population density will be made.

At the outset it should be noted that a precise decision as to major focus or area of concentration was somewhat difficult to determine from an examination of written communications relating to each project. titles of the projects in many cases appeared to be unrelated to the central purpose of the project. For example, one project had the title: Project APES-Appropriate Placement for Excellence. An inspection of the summary of that project indicated that a summer seminar would be conducted so that an English course of study could be developed. Another example was a project entitled: Project DOES-Dual Opportunity Education Service. An inspection of the summary of that project revealed that paraprofessionals would be introduced into a metropolitan school district to presumably up-grade services for students, teachers, school and community. While the titles of the projects

failed to identify the major focus of the project, the summaries of the projects were in many cases vague and ambiguous. A decision as to major focus was often difficult to determine. The following summary serves as one example:

MENOMINEE AREA PUBLIC SCHOOLS INTERDISCIPLINARY, MULTI-MEDIA, TEAM TEACHING PROJECT FOR THE CULTURAL AND PSYCHOLOGICAL INTEGRATION OF SECONDARY CURRICULUM Menominee, Public Schools

Plans will be made to improve the curriculum in grades 7-12 by using interdisciplinary, multimedia, and team-teaching approaches. Emphasis will be on giving secondary and adult-education students an understanding of the variety of cultures existing in the world, the impact of education on cultural change, and the interrelated significance of the disciplines included in the secondary curriculum. Teachers will be trained in team-teaching methods and the use of programmed instruction and audio-visual materials for large-group instruction. Periodic workshops will be scheduled for the teachers and experiments will be conducted in the preparation and presentation of trial lessons and units of instruction through the use of various media.

The above summary shows the encompassing nature of the projects and the difficulty of discerning the major focus.

Even when a decision was reached regarding major focus or area of concentration for a single project there still was a wide range of variation present. One project might be granted to a high school for the use of testing the results of a private institute while another project might allow the establishment of a consortium for educational thinking.

Accepting the difficulty of the written communication regarding many of the projects, the wide range of

areas of concentration of the 107 projects, the lack of uniformity of school organizational patterns in Michigan with regard to area served, student enrollment and service rendered, the subsequent tables will aid in the formulation of impressions as they relate to the Elementary and Secondary Education Act Title III (PACE) in the state of Michigan.

Projects According to Area of Concentration or Major Focus

Each of the 107 projects will be examined so that the major focus or area of concentration can be determined. As mentioned previously in this chapter, the written communication regarding each project did not lend itself to a precise and definite decision as to the major focus or area of concentration. However, with close inspection of each project summary or abstract, the area of concentration or major focus seemed to be concerned with six broad areas. The six areas are: (1) Evaluation or Assessment, (2) Inservice, (3) Pre-School, (4) Auxiliary Programs (Guidance, Counseling, Educational Media, Dissemination and Information Centers, Paraprofessionals, and Outdoor Education), (5) Subject or Content Area, (6) Innovative Programs for Student Participation.

Table 4.1, page 43, presents the 107 projects as each project relates to the areas as defined:

- l. Evaluation or Assessment represents those projects whose primary emphasis is over-all assessment of a school, a district or districts. Testing practices or materials are also included in this category.
- 2. <u>In-Service</u> represents those projects whose major focus was improvement of educators relating to certain areas or competencies to be developed. Seminars and workshops that would take place during the school year and the summer months are included here. Experiences involving educators in planning, in considering various aspects of educational change are also included in this category.
- 3. <u>Pre-School</u> includes those projects whose area of concentration was directly for children under five years of age.
- 4. Auxiliary Programs represents those projects designed for supplementary or enrichment service to educators and students. For example, a project that would provide services such as diagnostic testing would, in principle, be advantageous to educators so that ultimately they could provide a more beneficial service to students. That type of service is needed only periodically and is not central to the functioning of a school as a teacher would be. Services that are needed periodically or services available on a limited basis are grouped in the category entitled Auxiliary Programs.
- 5. Subject or Content Area includes those projects specifically designed for improvement in a subject or content area within the school curriculum.
- 6. Innovative Programs for Student Participation includes those projects whose major focus or area of concentration was somewhat experimental in design. The programs within this category are those that were planned specifically for student participation and were to be an inherent part of the school curriculum. While some projects in the Auxiliary Program category are for student participation, they (Auxiliary Programs) are only part-time or the service is available only on a limited basis. The projects within this category seem to be somewhat a departure from conventional school subjects or patterns and the program is a functioning part of the school curriculum.

Table 4.1 presents the 107 projects as each project relates to the previously defined categories.

TABLE 4.1.--ESEA Title III (PACE) Projects According to Area of Concentration or Major Focus

	Number of Programs	Percentage of Total Programs
Evaluation or Assessment	18	16.82
In-Service	16	14.95
Pre-School	6	5.61
Auxiliary Programs (Guidance, Counseling, Educational Media, Outdoor Education, Paraprofessionals, Information and Dissemination Centers and Services)	32	29.91
Subject or Content Area	24	22.43
Innovative Programs for Student Participation	11	10.28

Table 4.1 is a concise representation of the 107 projects funded under the auspices of Title III as the projects relate to broad areas of concentration. Programs of an auxiliary nature was the major focus for almost one-third of the total projects funded. Included in this

group were those projects that would allow services to be rendered to a school on a limited or supplementary basis. Those projects that allowed improvement in a single subject or content area was the major focus of 22.43% of all the projects funded. Projects that were concerned with bringing about improvement in schools by means of evaluation or assessment accounted for 16.82% of all the projects. In-service education accounted for 14.95% of the projects. Pre-School programs were the area of concentration for 5.61% of the projects. Those projects that would allow the establishment of programs in schools that seemed to be on an innovative nature accounted for 10.28% or a total of 11 projects.

While Table 4.1 provides a representation of all the projects funded as the projects relate to broad areas as defined, missing is any indication as to the nature of those projects found within any one category. With Auxiliary Programs representing 29.91% of all the projects, what is the nature of those supplementary or enrichment services? A total of 24 projects are said to be concerned with a subject or content area. What subjects or content areas received attention? With 11 projects that seemed to be of an innovative nature, what were these programs?

Each one of the broad headings found in Table 4.1, page 43, will be delineated so that a better understanding

can be gained concerning the nature of each project. projects found within each of the categories will be presented by a brief statement that will best conceptualize the major focus or area of concentration. As mentioned previously, the title of each project frequently did not reveal the major focus of the project. After an examination of each project summary, the major focus or area of concentration was conceptualized by a brief statement. It should be noted that to conceptualize each project by the use of a brief statement is only an attempt to present the major focus or area of concentration of the 107 projects funded in Michigan as each project relates to the broad categories used in Table 4.1, page 43. lowing written communication relating to one project funded may illustrate the process used for the subsequent tables. The information relating to that project is as follows:

COMPREHENSIVE AREA STUDY TO DEVELOP A LONG-RANGE PLAN OF INTEGRATION INTO COOPERATIVE EFFORTS OF ALL FEDERAL PROGRAMS AND COMMUNITY RESOURCES Sault Ste. Marie, Public Schools

Needs will be determined and programs planned to serve students in a remote, sparsely populated area. Plans will include: (1) transportation of pupils, supplies, and mail, (2) such comprehensive educational services as counseling, remedial instruction, health, recreation, social work, and other services incidental to the community's welfare, (3) adoption of new and improved educational programs including foreign languages, science, and other areas of interests, (4) educational television, radio, and communications, and (5) mobile education services and such community resources activities as library services and the use of specialists for lectures and demonstration. Approximately 5,000 public and non-public students in grades K-12 will be served.

The first decision as to area of concentration or major focus was that the above project was related to evaluation or assessment. The above project was one of 18 projects that seemed to be concerned with evaluation or assessment and was recorded under that category in Table 4.1, page 43. To gain a better understanding of that project within the category of evaluation or assessment, a second review of each project was made so that the nature of the evaluation or assessment project could be determined. The above summary was then recorded by using the brief statement "assessment of needs." The same process was used for each project funded in the state of Michigan.

The tables that follow will present the 107 projects as each project relates to the appropriate category. Following the brief statement conceptualizing each project is the page number where a summary of that project is located in the appendix.

Evaluation or Assessment

Evaluation or assessment was the broad heading for 16.82% of all the projects funded. The extent to which the evaluation or assessment was implemented or executed could not be determined within the limits of this study. However, Table 4.2 does present, in part, the nature of the projects that seemed to be concerned with ways which would

TABLE 4.2.--ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was Evaluation or Assessment

	Appendix Page
Evaluation for four districts	92
Assessment of needs	94
Assessment of needs	95
Materials and evaluation center	98
Over-all assessment of needs	99
Over-all assessment of Upper Peninsula	100
Assessment of educational and cultural needs · · · · · · · · · · · · · · · · · · ·	106
Test new practices on students & evaluate results	104
Chair for educational innovation & Consortium for educational thinking	107
Consultant service for 15 counties on Upper Peninsula	115
Educational information system	117
Planning of educational Plaza or Park	119
Systematic approach to educational change	123
Center for Strategies of educational change	126
Dissemination Center for Title III	140
Assessment of needs for educational Park	145
High School to test results of a Private Institute	132
High School to test results of a Private Institute	134

within the range of what has been conventionally termed, evaluation or assessment.

A review of Table 4.2, page 47, indicates that six projects were concerned with assessment of educational needs; the needs of which were all encompassing or of a general nature. Four projects were for assessment or planning with a definite objective or the objective could be They are: Development of an educational Plaza, inferred. Assessment of needs for an educational Park, Systematic approach to educational change, and Center for Strategies of educational change. Of interest to note is that three projects were funded which would allow the implementation of research projects in which students would be used as the subjects of research. Of the three research projects using students for experimental purposes, two of those projects were using programs advanced by a Private Institute. One project allowed the development of a dissemination center for ESEA Title III. It would be interesting to determine what information was disseminated and how widely the dissemination was carried out.

In-Service

A total of 16 projects provided ways for educators to improve their competencies relating to a specific objective. Those 16 projects were grouped using the heading entitled In-Service. Seminars and workshops that would take place during the school year and also the

summer months are included. When experiences would be provided for educators to plan and consider various aspects of educational change, including those of a subject or content area, those experiences are also included in Table 4.3.

As noted in Table 4.3, two in-service projects were granted for educators to improve their competencies in a single subject or content area; namely, language arts and English. Two projects dealt with the organizational pattern within a school. They are the Trump Plan and Team teaching. Efforts to develop something referred to as individualized instruction was the focus of four projects. When individualized instruction was the major focus of the project, the procedure used to accomplish individualized instruction consisted primarily of reorganization of the school pattern by the use of team teaching, flexible scheduling and references made to "non-graded." For the most part, the largest number of projects were designated for staff development or curriculum improvement. jectives or plans to bring about improvement were lacking in the written summaries.

Auxiliary Programs

Those projects concerned with services that are of a supplementary or enrichment nature are grouped under the heading entitled Auxiliary Programs. Most educators

TABLE 4.3.--ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was In-Service

Appendix Page
English Course of Study
In-Service to improve language arts 121
Instructional systems approach 94
Systemwide implementation of a perceptual development/non-graded/program
Individualized program for gifted 95
Staff development to individualize instruction
Staff development to individualize instruction
Individualized instruction-curriculum improvement
In-Service to implement Team Teaching 98
In-Service to implement Trump Plan 118
In-Service for use of new materials and methods
Examine role of board of education 128
Improving instruction
Professional growth
Improving curriculum
Curriculum improvement

recognize that an increasing number of personnel involved in school systems provide specialized services other than those directly responsible for students and those responsible for administration. Those services which are periodically needed or ones that are available on a limited basis are delineated in Table 4.4.

of the 32 projects appearing in Table 4.4, page 52, a total of 10 projects were concerned with ways to identify learning problems or student personnel services. How the identification of learning problems would be accomplished seemed to be dependent upon the use of diagnostic testing. The nature of the learning problems under diagnosis could not be determined or inferred from the project summaries.

A total of five other projects allowed the establishment of audio-visual or instructional material services. Three of the other projects were designed to disseminate educational information. Those projects are:

(1) Educational information and dissemination center, (2)

Comprehensive blueprint for cultural enrichment, and (3)

a Regional service center. Three projects allowed the establishment of facilities for use in a school that would supplement the regular classroom. They are: (1) After school study facility, (2) Learning resources laboratory, and (3) Extended classroom. Two projects allowed the consideration of the use of paraprofessionals. As the result

TABLE 4.4.--ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was that of Auxiliary Programs (Guidance, Counseling, Educational Media, Outdoor Education, Paraprofessionals, Information Centers)

,	Appendix Page
Expand Audio-Visual center	95
Educational media & retrieval system	96
Instructional material center	117
Instructional material center	129
Media center, student personnel	100
Educational information & dissemination center	99
Comprehensive blueprint for cultural enrichment	107
Regional service center	133
Learning center to identify learning problems	103
Diagnose learning problems in kindergarten	135
Learning disabilities correction center	138
Identify perceptual motor development	99
Center for diagnosis of learning problems	146
Special service for atypical child	111
Student personnel	109
Pupil personnel special service	140

TABLE 4.4.--Continued

	Appendix Page
Professional service to assist guidance	105
Center to coordinate student personnel service	111
After school study facility	108
Learning resources laboratory	106
Extended classroom	92
Study uses of paraprofessionals	112
Uses of paraprofessionals	127
Pioneer village museum	105
Outdoor education	104
Outdoor education	108
Outdoor education	108
Outdoor education	109
Outdoor education	146
Community school program	102
Community school service	128
Community education center	131

of one project, a museum was made available to all of the students in a five county area.

Appearing also in Table 4.4, page 52, are five projects which would allow provisions for outdoor education facilities. The outdoor education projects, for the most part, supplemented the study of conservation, nature study and environmental ecology by providing facilities that would be under the direction of public schools. Also indicated in Table 4.4 are three projects that would allow the development of community school programs. The community school programs made provisions for physical education, recreation and to some extent enrichment programs in various subject areas available to students during the summer months and also weekends during the regular school sessions.

Pre-School

Six projects were funded for children of less than five years of age. The projects funded for programs especially designed for pre-school children will be presented in Table 4.5.

Inferences from the available summaries or abstracts seem to indicate that those efforts designed for pre-school children were primarily experimental in nature. It appears also that the projects in Table 4.5 had as an objective one that is specific; namely, a specific

TABLE 4.5.--ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was Pre-School

	Appendix Page
Four pre-school classrooms with emphasis on community and parental involvement	. 101
Language and speech for parents and pre-school children	. 103
Language and speech for pre-school children	. 114
Program for disadvantaged	. 118
Preventive-type program to identify exceptional children	. 120
Four pre-school demonstration centers	. 144

objective relating to subjects thought to be necessary for children or specific objectives relating to an identified group. Language development was the major focus of two pre-school programs. The specific objective relating to identified groups are the disadvantaged and the exceptional children. One feature of all the projects within the category Pre-School is that attempts were made to include parents in the program. Parental understanding of the major focus of the project seemed to have been "built-in" the program as a necessary element.

Subject or Content Areas

Of all the projects funded under the auspices of Title III, 24 projects or 22.43% of the total projects funded in Michigan, were designated for improvement of teaching or learning within the limits of one subject or content area. The subjects or content areas that received attention for improvement in schools are presented in Table 4.6.

Inspection of Table 4.6, page 57, indicates that reading and language skills dominate the subjects to receive attention. Of the Title III projects that were concerned with Single Subjects or Content Areas between the dates 1966 and 1970, reading and language skills allowed for 40% of those subjects to receive attention. Of those, one was geared to creative dramatics. Music as the major focus accounted for three projects and of those three, two were for the handicapped. Social studies and physical education each were represented by two projects. Vocational education received four projects. As indicated in Table 4.6, one project was for a program which would be computer-based. The subject which would be programmed for the computer could not be determined from the project summary.

TABLE 4.6.--ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was a Subject or Content Area

	Appendix Page
Math for terminal students	96
Math-four year sequential	144
Creative dramatics to enrich language skills	93
Language arts	96
Language for deaf	116
Language and math for culturally	
deprived	141
Foreign language	110
Foreign language	138
English	136
Reading program	97
Reading laboratory	113
Reading for third grade	142
Music for handicapped	102
Music for handicapped	129
Music-opera	115
Physical education-sequential curriculum	110
	110
Physical education-interdisciplinary	
approach	137
Social studies	124

TABLE 4.6.--Continued

					I	Appendix Page
Social studies	•	•		•	•	148
Vocational	•	•	•	•	•	93
Vocational	•	•	•	•	•	133
Vocational	•	•	•	•		142
Vocational	•		•	•	•	147
Computer-based learning	•	•	•	•	•	120

Innovative Programs for Student Participation

Of the 107 projects funded by ESEA Title III in Michigan, 96 projects could be categorized as to major focus using the headings previously presented in this chapter. There were, however, 11 projects whose major focus was somewhat that of an innovative nature. The 11 projects seemed to have had a design which could be said to depart from conventional school subjects or patterns. Each of the projects found in Table 4.7 have as a major focus that which would entail full participation on the part of students and also be an integral part of the school curriculum.

From the summaries of those projects appearing in Table 4.7 it would appear that they are of an interdisciplinary nature. An attempt seems to have been made to

TABLE 4.7.--ESEA Title III (PACE) Projects Whose Area of Concentration or Major Focus was Innovative Programs for Student Participation

Appendix Page
Programs for drop-outs
Program for drop-outs
Value analysis
Value education
Human relationsShared learning 114
Human relations laboratory
Self-concept development
Self-concept development
House project for mentally retarded boys 97
Comparative Cultures
Humanities program

assess local needs and resources and thereby devise a program that would be included in the "day-to-day" functioning of a school. Programs were devised which gave consideration to those students who were thought to be potential drop-outs. In one case, a two-story house was purchased which would provide experiences for mentally retarded boys. Six projects were value oriented where student values, self-concepts or human relations was the major focus. How the student views himself and others

about him seemed to have been the major consideration of those six projects. One project drew on the resources of a local university and developed a program which would include students from several schools to undertake the study of comparative cultures. One project allowed the development of a humanities program. Of the 107 projects funded in the state of Michigan, the humanities program was the only one that could be considered that of a fine arts nature. The spirit of critical inquiry was encouraged in the study of the interrelationship of art, music and literature. Moral and philosophical issues were also to be included.

It may be appropriate here to briefly summarize what has thus far been presented. The Elementary and Secondary Education Act Title III (PACE) identified an area of education in the nation's elementary and secondary schools to receive attention. Title III allowed educators at the local level the opportunity to design and implement programs "for supplementary educational centers and services . . . and establishment of exemplary elementary and secondary school educational programs." Creativity was conceived as the general framework through which the projects would be funded. In the state of Michigan, 107 projects between the dates of 1966 and January 1, 1970 were funded. The intent of this study was to determine the major focus or area of concentration of

each project the state of Michigan funded. As mentioned, creativity had been decided upon as the framework through which programs of a supplementary and exemplary nature would be funded. Given that framework, the question then became: What was the major focus or area of concentration of the projects funded in the state of Michigan?

At the outset of this study, as much as a unified listing of the projects funded was unobtainable. mation relating to summaries of each project was obscure. However, persistence did allow the summaries to be brought together. With only the summaries of all the projects funded, a careful review and examination began. After many reviews of the 107 summaries, six broad headings seemed to emerge. The six headings used in Table 4.1, page 43, were used in a broad and general way only as a means to show the relationship of the 107 projects to those six headings. After each project was presented as it related to six broad headings, a further examination was executed. Each of the broad headings appearing in Table 4.1 was presented individually. Each project within a broad category was examined so that a better understanding of each project would result. The major focus or area of concentration was presented by the use of a brief statement. The brief statement was used only as a means to conceptualize as briefly as possible the major focus or area of concentration. The major focus or area of

concentration of each of the 107 projects was then presented by employing the broad headings of: (1) Evaluation or Assessment, (2) In-Service, (3) Auxiliary Programs, (4) Pre-School, (5) Subject or Content Areas, and (6) Innovative Programs for Student Participation.

With the intent of the study being that of determining the major focus or area of concentration of each of the Title III projects funded in Michigan, the tables presented previously in this chapter accomplished that end. While the tables did present the major focus or area of concentration, an inspection of the tables revealed an unclear element. To illustrate the missing element the following examples may suffice. Table 4.1, page 43, indicated that 18 projects were concerned with evaluation or assessment. Within that category, five projects were for "assessment of needs." Table 4.4, page 52, indicated that 32 projects were of a supplementary or auxiliary nature. Within that category, 5 projects were for the establishment of audio-visual or instructional material services. While the major focus or an area of concentration is apparent, greater clarity of the major focus or area of concentration would result if one would know where the audio-visual service would be available. Would the facility encompass one school? Would the facility encompass an Intermediate School District? The same questions would apply to each of the 107 projects funded.

evaluation within one school or is the assessment for one school district? Would the project that allowed an inservice experience so that teachers could develop an English course of study be for teachers in one school or for teachers in one Intermediate District?

Having developed a means of establishing the major focus or area of concentration of each project funded in the state of Michigan from the inception of Title III in 1966 through and including January 1, 1970, each project will now be examined so that another dimension can be discerned; namely, the dimension that reveals the sphere of influence. Sphere of influence in this study refers to where the project was intended to bring about improvement. To determine where the major focus or area of concentration would bring about improvement the school organization pattern is used. The school organization patterns used in this study are: (1) one school, (2) one school district, and (3) combined school districts. They are defined as:

- (1) One school refers to an educational organization under the direction of one administrator and one teaching staff.
- (2) One school district refers to an educational organization that includes more than one school.
- (3) Combined school districts refers to an educational organization that would encompass more than one school district.

The subsequent tables will present the major focus of each of the 107 projects funded. Concurrently the sphere of influence where the project was intended to bring about improvement is presented.

Sphere of Influence

Table 4.8, page 65, presents the major focus of those projects relating to the broad heading of Evaluation or Assessment. Concurrently the sphere of influence of each project is presented.

From the Table 4.8, page 65, it would appear that where evaluation or assessment is undertaken to bring about improvement, more than one school is considered.

With the exception of two projects, all efforts of evaluation or assessment include one school district or more.

Also of interest is that two projects were granted for research to take place in a one school organization pattern. Significant of these two exceptions perhaps is that students are used as subjects of research. All students in these two schools will test the results of an educational program that had been developed by a Private Institute.

Appearing in Table 4.9 is the major focus of those projects relating to In-Service programs for educators. Where the in-service programs were to take place in terms of the school organizational pattern is also presented.

As indicated in Table 4.9, page 66, when inservice education was advanced as a way to bring about
change in schools, educators were representative of one
school district. Two projects were funded which would allow programs representative of combined school districts.

TABLE 4.8.--The Sphere of Influence of Evaluation or Assessment of ESEA Title III (PACE) Projects

		,		
Appendix Page		One School	One School District	Combined Districts
92	Evaluation for four districts			х
91	Assessment of needs		х	
95	Assessment of needs			×
98	Materials and evaluation center			х
99	Over-all assessment of needs			×
	Over-all assessment of Upper			
101	Peninsula		_	X
	Assessment of educational and			
106	cultural needs		x	
	Test new practices on students			
104	and evaluate results		х	
	Chair for educational innova-	1		
107	tion & Consortium of educa-	1 1	-	
107	tional thinking	 	х	
775	Consultant service for 15			
115 117	counties on Upper Peninsula	 -		X
119	Educational information system Assessment of educational Plaza			х
7.13	Systematic approach to educa-	 	×	
123	tional change		\mathbf{x}	
4.60	Center for strategies of educa-	-		
126	tional change		x	
	Dissemination center for			
140	Title III			x
	Assessment of needs for educa-			
145	tional Park		х	
	High School to test results of			
132	a Private Institute	x	1	
	High School to test results of			
134	a Private Institute	х		
		-		

TABLE 4.9.--The Sphere of Influence of In-Service ESEA Title III (PACE) Projects

Appendix Page		One School	One School District	Combined Districts
93	English course of study	x		
	In-service to improve language			
121	arts		×	
94	Instructional systems approach		×	
	Systemwide implementation of a			
-	perceptual development/non-			
131	graded/program		x	
	Individualized program for			
95	gifted	x		
	Staff development to			
100	individualize instruction		х	
	Staff development to			
122	individualize instruction		x	
	Individualized instruction-			
143	curriculum improvement		х	
	In-service to implement		1	
98	Team Teaching		x	
	In-service to implement	İ		
118	Trump Plan		<u>x</u>	
	In-service for use of new	ı	1	
124	materials and methods		<u></u>	
	Examine role of board of	1	[
128	education		×	
125	Improving instruction			<u> </u>
112	Professional growth	- ;		<u>x</u>
130	Improving curriculum Curriculum improvement	×	$-\mathbf{x}$	
137	carrrearam rubrovement		A	

In three cases, in-service education was directed to a staff of educators in one school, one of which allowed an English course of study to be developed. Another made provisions to study the gifted students. The other project included in the In-Service category was directed to a staff of educators who had as a major focus that of improving the curriculum by means of reorganizing the high school program to meet the needs of a highly diversified student body in a changing urban community.

For the most part, the In-Service programs funded were for educators representative of an entire school district.

The school organizational pattern of those projects that made possible various services such as guidance, counseling, educational media, outdoor education and others is presented in Table 4.10.

In Table 4.10, page 68, for the most part, the projects allowing for the auxiliary services were granted to school organizations that included more than one school. Where one school was recipient of a project, the services varied. One project allowed for diagnosis of learning problems of kindergarten children. Two projects made provisions for supplementary classrooms equipped with programmed materials and another project allowed for an after school study facility where students who chose to do so could remain after school and study. One school

TABLE 4.10.--The Sphere of Influence of Auxiliary Programs Funded by ESEA Title III (PACE)

Appendix Page		One School	One School District	Combined Districts
95	Expand audio-visual center		х	
96	Educational media & retrieval system	+	x	
117	Instructional material center	1	x	
129	Instructional material center	+-1		×
100	Media center, student personnel	1		×
	Educational information &	1-1		
99	dissemination center	1 1	\mathbf{x}	
	Comprehensive blueprint for cultural	1		
107	enrichment	1 1	\mathbf{x}	
133	Regional service center	1	×	
	Learning center to identify	1	1	
103	learning problems		\mathbf{x}	
	Diagnose learning problems in	1		
135	kindergarten	$ \mathbf{x} $	ļ	
	Learning disabilities correction			
138	center]]	x	
	Identify perceptual motor de-			
99	velopment	1 1	x	
	Center for diagnosis of learning			
146	problems	1 1	x	
111	Special service for atypical child		х	
109	Student personnel		×	
140	Pupil personnel special service		x	
	Professional service to assist			
105	guidance	1 1	İ	x
	Center to coordinate student			
111	personnel service	ł I	x	
108	After school study facility	х		
106	Learning resources laboratory	x		
92	Extended classroom	х		
112	Study uses of paraprofessionals		х	
127	Use of paraprofessionals		х	
105	Pioneer village museum			х
104	Outdoor education		х	
108	Outdoor education		х	
108	Outdoor education		х	

TABLE 4.10.--Continued

Appendix Page		One School	One School District	Combined Districts
109	Outdoor education			х
146	Outdoor education	X		
102	Community school program		x	
128	Community school service		x	
131	Community education center		x	

received a project which would allow the development of an outdoor educational laboratory on an existing site.

The sphere of influence represented by school organization patterns of those projects whose major focus was Subject or Content Areas will be presented in Table 4.11, page 70.

The school organization pattern of One School District and Combined School District received 66% of those projects designed to bring about improvement represented by a subject or content area. When math, language arts, reading, physical education, social studies, or vocational education was the major focus, the projects were designed to influence all of the schools in one district or districts. The table seems to indicate that when

TABLE 4.11.--The Sphere of Influence of the Subject or Content Area ESEA Title III (PACE) Projects

Appendix Page		One School	One School District	Combined Districts
96	Math for terminal students	-	x	
144	Mathfour year sequential		х	
	Creative dramatics to enrich		†	
93	language skills		х	
96	Language arts		х	
116	Language for deaf	×		
	Language and math for cul-			
141	turally deprived		x	
110	Foreign language		х	
138	Foreign language		х	
136	English	х		
97	Reading program		х	
113	Reading laboratory		х	
142	Reading for third grade	х		
102	Music for handicapped	×		
129	Music for handicapped	х		
115	Music	×		
	Physical education-			
110	sequential curriculum	ļ	x	l t
	Physical education-			
137	interdisciplinary approach	ļ	x	
124	Social studies		х	
148	Social studies		х	
93	Vocational		х	
133	Vocational	х		
142	Vocational			×
147	Vocational		х	
120	Computer-based learning	х		

improvement is thought to be necessary, and a single subject or content area is the major focus, the improvement should pervade all the schools in one district or districts. There were, however, eight projects which would include only one school. Of those eight projects, whose area of influence consisted of one school, three were for music of which two were for the handicapped. Three projects were for improvement of reading or language skills and of those three one was language for the deaf, one for high school English and another for reading in the third grade. One project concerned with vocational education was within one school as was a project concerned with computer-based learning.

The school organization pattern of those projects concerned with the education of children of less than five years of age is presented in Table 4.12.

The nature of Pre-School programs would preclude their being in an organizational pattern other than that of one school. However, the projects funded that allowed pre-school programs to be developed were funded to school organization patterns that would include children from a large area. From Table 4.12 the two projects that were concerned with language development were granted to an Intermediate School District. The project concerned with four pre-school classrooms with emphasis on community and parental involvement was granted to a city school

TABLE 4.12.--The Sphere of Influence of Pre-School ESEA Title III (PACE) Projects

Appendix Page		One School	One School District	Combined Districts
101	Four pre-school classrooms with emphasis on community and parental involvement	x		
103	Language and speech for parents and pre-school children	x		
114	Language and speech for pre- school children	x		
118	Program for disadvantaged	X		
120	Preventive-type program to identify exceptional children	x	,	
144	Four pre-school demonstration centers	х		

district as were both the program for disadvantaged and the pre-school project allowing for four pre-school demonstration centers. The project for exceptional children was also granted to a city school district.

The school organization pattern of those projects which had as a major focus that which would seem to be of an innovative nature is presented in Table 4.13.

As indicated in Table 4.13, with one exception, those projects that seemed to be of an innovative nature were funded where the program would influence those within one school. The one exception was that project dealing

TABLE 4.13.--The Sphere of Influence of Innovative Programs for Student Participation ESEA Title III (PACE) Projects

Appendix Page		One School	One School District	Combined Districts
126	Program for drop-outs	x		
139	Program for drop-outs	x		
103	Value analysis	x	 	
143	Value education	х		
	Human relations			
114	shared learning	x	1	1
123	Human relations laboratory	х		
134	Self-concept development	х		
136	Self-concept development	х		
	House project for mentally			
97	retarded boys	x		
122	Comparative Cultures			х
113	Humanities Program	х		

with the study of comparative cultures which would include students from more than one school district.

The sphere of influence as defined previously in this chapter will now be summarized. Title III which had creativity as a framework through which projects would be funded granted projects in the state of Michigan whose sphere of influence would include the following:

(1) ESEA Title III projects whose sphere of		
influence included those representative of		
combined school districts	•	16
(2) ESEA Title III projects whose sphere of		
influence included those representative of		
one school district		57
(3) ESEA Title III projects whose sphere of		
influence included those within one school	_	34

The above data shows that of the 107 projects funded, 68.22% of those projects were granted to school organization patterns which would represent educators of one school district or more. Those projects funded whose sphere of influence would include those within one school accounted for 31.78% of the total projects funded.

Related Information

Having established the procedures to determine the major focus of each of the projects funded under the auspices of ESEA Title III, the author of this study was led to determine the sphere of influence of each project so that greater clarity of the major focus would be presented. During the process of accomplishing those ends, information was gathered concerning Title III programs in Michigan. The information gathered relates to the distribution of the projects funded as those projects relate to the student enrollment population within Intermediate Districts.

Presented in Table 4.14, page 75, is the distribution of the projects funded as the projects relate to the student enrollment population of Intermediate School

TABLE 4.14.--ESEA Title III (PACE) Project Distribution According to Population of Intermediate Districts in Michigan

	Number
Projects to Intermediate School Districts With Student Enrollment of More Than 100,000	38
Projects to Intermediate School Districts With Student Enrollment of More Than 50,000 and Less Than 100,000	17
Projects to Intermediate School Districts With Student Enrollment of More Than 25,000 and Less Than 50,000	20
Projects to Intermediate School Districts With Student Enrollment of More Than 10,000 and Less Than 25,000	23
Projects to Intermediate School Districts With Student Enrollment of Less Than 10,000	9

Districts. The student enrollment of Intermediate Districts was used as opposed to enrollment of individual schools for several reasons. Many of the projects funded in Michigan were for purposes that pervade an entire Intermediate District such as student personnel services, educational media facilities and assessment or evaluation projects. Also the Intermediate District student population would provide some complexion of the local environs.

For example, one school in Detroit may have the same enrollment as one school in a rural area. By providing
population data for an Intermediate District some notions
can be gained as to the geographical areas in the state
where ESEA Title III projects were funded.

Table 4.14, page 75, indicates that 36 projects or 34% of the projects funded went to areas in the state of Michigan whose Intermediate Districts had a student enrollment of more than 100,000. Accounting for 56% of the projects funded in Michigan are areas in the state of Michigan whose Intermediate Districts have a student enrollment of less than 100,000 yet more than 10,000. Of the 107 projects funded, 9 projects went to Intermediate Districts with a student enrollment of less than 10,000.

It is important to note that of <u>all</u> the Intermediate Districts (59) in the state of Michigan, 32% of the Intermediate Districts have a student enrollment with less than 10,000. Of all the projects funded in the state of Michigan, 9% of the projects went to Intermediate Districts with a student enrollment with less than 10,000.

Summary

The purpose of this chapter has been to present the findings as they relate to the major focus of the 107 projects funded under the auspices of ESEA Title III from 1966 through and including January 1, 1970. After a careful review of all projects, six broad headings seemed to emerge. The projects were presented by numerical frequency as they related to the broad headings of:

- (1) Evaluation and Assessment
- (2) In-Service
- (3) Pre-School
- (4) Auxiliary Programs
- (5) Subject or Content Areas
- (6) Innovative Programs for Student Participation

The major focus of all projects within the above broad headings were determined and presented individually accompanied by a brief statement. So that greater clarity of the major focus could be determined, each project was examined to determine the sphere of influence; sphere of influence being the school organization pattern where the project was funded.

Presented also in this chapter was information relating to the student enrollment population of Intermediate Districts where projects were funded.

Interpretation and summaries have been presented throughout this chapter where appropriate.

Conclusions, recommendations and discussion of the study will follow in Chapter IV.

CHAPTER IV

SUMMARY, CONCLUSIONS, RECOMMENDATIONS

Summary

This study was undertaken to review and examine those projects that had been funded under the auspices of ESEA Title III from its inception in the state of Michigan in 1966 through and including January 1, 1970. mentary and Secondary Education Act Title III identified an area of education in the nation's elementary and secondary schools to receive attention. Title III allowed educators at the local level the opportunity to design and implement programs "for supplementary educational centers and services . . . and establishment of exemplary elementary and secondary education programs." Creativity in this study was conceived as the framework for which the projects would be planned. Given the framework of creativity the study was undertaken to examine those projects funded in the state of Michigan. A review of selected educational literature was made so that a conceptual framework could be developed. The conceptual framework relating to creativity was presented in Chapter II, pages 23 through 36. Each project funded in Michigan via a

program developed by the Federal government to advance creativity was subject to review and examination. Examination of each project related to the following aspects:

- (1) The major focus or area of concentration of each project as inferred from the written communication as obtained from the State Department of Education in Michigan.
- (2) The sphere of influence where each project was funded.
- (3) The distribution of projects funded according to population density.

After an examination of each project relating to the above, the results were presented in Chapter III.

Each project and its relationship to the areas under investigation was recorded in the form of tables. The information gained as a result of this study can allow some firm conclusions to be drawn.

Conclusions About Major Focus or Area of Concentration

The ESEA Title III (PACE) projects funded in the state of Michigan between the dates 1966 and January 1, 1970 can be grouped according to six broad categories. The categories and the total number of projects in each category are:

a.	Evaluation or Assessment Projects	•	•	•	•	•	•	•	18
b.	In-Service Projects	•		•		•			16
c.	Pre-School Projects			•			•		6
	Auxiliary Program Projects								
	Subject or Content Area Projects								
f.	Innovative Programs for Student								
	Participation Projects		_	_	_	_	_	_	11

A total of 18 ESEA Title III (PACE) projects	were
funded which were concerned with evaluation or assess	ment:
a. Evaluation or assessment of a general nature	7
b. Chair for educational innovation	1
c. Consultant service for 15 counties	1
d. Planning or assessment with specific	• •
objectives	Δ
e. Information and dissemination center	
or sorvice	າ
or service	4
g. High school to test results of a Private Institute	2
Private institute	2
A total of 16 ESEA Title III (PACE) projects	were
funded which were concerned with in-service education	1 :
a. In-service for language arts and English	2
b. In-service for reorganization of schools	
using such concepts as team teaching,	
flexible scheduling and non-graded	8
c. In-service for use of new materials	• • •
and methods	1
d. In-service to examine role of board	• • -
of education	1
e. Curriculum improvement & professional	• • -
growth	4
growen	• • •
A total of 32 ESEA Title III (PACE) projects	were
funded which were concerned with Auxiliary services:	
 a. Facilities to aid student personnel or 	
diagnostic services	. 10
b. Audio-visual aids & materials	
c. Regional information centers	. 3
d. Study and uses of paraprofessionals	. 2
e. Community school programs	. 3
f. After-school study facility	
g. Extended classroom and learning	
laboratory	. 2
h. Outdoor education	. 5
i. Pioneer village museum	. 1

A total of 6 ESEA Title III (PACE) projects were funded which were concerned with pre-school programs:

A total of 24 ESEA Title III (PACE) projects were funded which were concerned with improvement in a single subject or content area:

10 b. 3 c. 2 Physical education . . d. Math 2 Social studies e. Vocational f. Computer-based learning . . q.

A total of 11 ESEA Title III (PACE) projects were funded which were of an innovative nature and in which student participation was the focus:

This study was not designed to evaluate those projects that had been funded in the state of Michigan. The study was only to determine the major focus or area of concentration of each project funded. As stated earlier in this study, the ESEA Title III (PACE) was established

so that opportunities would be available for educators at the local level to develop projects which would advance creativity.

With creativity being a process between an individual and "his world" no attempt has been made to ascertain the degree to which that process was manifest.

Neither was an attempt made to quantify or establish a criterion that would judge one project creative and another project not so creative. To do so would be the antithesis to the conceptual framework relating to creativity in Chapter II. However, inferences made from the available communications relating to the projects examined revealed several projects that had been funded which should receive attention. Those projects which seemed to have provided opportunities for schools to depart from conventional school practices will be discussed.

1. Never before in the history of education has the education of children less than five years of age been seen worthy of Federal or state financial supplement. In the state of Michigan, six projects were funded which would allow opportunities for educating children under five years of age. Also a unique feature of all the pre-school programs was the fact that parental understanding and participation was encouraged and seen as a necessary function for the success of the program.

A large number of pre-school projects seemed to have been concerned with language development and all of the projects seemed to be concerned with one aspect of child development; namely, cognitive growth. With respect to projects that may be funded in the future via ESEA Title III, where creativity is the framework, one may wonder if other aspects of child development will be considered. The importance of play in the development of children; opportunities for expression such as dance, painting, music, drama; and allowing freedom for children to choose alternatives from a group of experiences made available are other aspects of development that are worthy of consideration. Intensive study of the effects the pre-school program has on the developing child would be merited, given the national trend toward a focus on early childhood education and the worth of children.

2. Five projects allowed the opportunity to establish outdoor education facilities. Having an educational facility "off the school premises" is a direction for education that has been relatively unexplored. With provisions made possible for students to gain "real experiences" under the direction of

educators, the congruence of theory and practice should be increased.

- 3. Conventionally, schools have been primarily concerned with subjects or content areas. Often what the student thought about the subjects or himself was neglected. Human relations, the student's self-concept and value-oriented classes received the attention of six projects. It would appear that the student's feelings, attitudes, and perceptions is a focal point that is receiving more concern from educators.
- 4. Problems of an international dimension are revealed every day by a most cursory glance at the television or newspaper. The need to study and understand cultures other than one's own was the major focus of one project funded by ESEA Title III. The opportunity was made available for students from several schools to capitalize on the resources of a local university to gain better understandings of people from other countries.
- 5. The ESEA Title III (PACE) funded one project which was of a fine arts nature. With a spirit of critical inquiry the relationship of art, music and literature was viewed. This project was in a

school district with a student enrollment of a little over 10,000. Although the humanities program was for one high school, opportunities were explored where this program would be influential in effecting the elementary school curriculum. Only one project of the 107 projects funded was concerned with a humanities program of a fine arts nature. Given the framework through which ESEA Title III (PACE) projects are funded, it will be of interest to note whether an increase of this type of project will be funded in the future.

Recommendations for Further Research

In view of the foregoing conclusions, the writer recommends for further research or investigation:

- 1. The role of Title III as seen by "significant others" in the State Department of Education in Michigan.
- 2. The role of Title III as seen by those responsible for the operation and administration of Title III Programs in the State Department of Education in Michigan.
- 3. Examination of the rationale for approving projects as developed by those responsible for approval of projects.

- 4. The decision-making process of those responsible for approving projects.
- 5. The process whereby a school organization determines the need for Title III projects.
- 6. An examination of the role of the Advisory Board of ESEA Title III (PACE) in the state of Michigan.

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Allport, Gordon. Becoming: Basic Considerations for a Psychology of Personality. New Haven, Conn.: Yale University Press, 1955.
- Anderson, Harold, ed. <u>Creativity and Its Cultivation</u>. New York: Harper & Bros., 1959.
- Anderson, Vernon. Principles and Procedures of Curriculum Improvement. New York: The Ronald Press, 1956.
- Association for Supervision and Curriculum Development,

 1962 Yearbook. Washington, D.C.: The Association,

 1962.
- . 1963 Yearbook. Washington, D.C.: The Association, 1963.
- . 1965 Yearbook. Washington, D.C.: The Association, 1965.
- . 1969 Yearbook. Washington, D.C.: The Association, 1969.
- . 1970 Yearbook. Washington, D.C.: The Association, 1970.
- Barron, Frank. Creativity and Psychological Health.
 Princeton, N.J.: D. Van Norstrand Co., Inc., 1963.
- Bergson, Henri. <u>Creative Evolution</u>. New York: Modern Library, 1944.
- Bruner, Jerome S. The Process of Education. New York:
 The Vintage Book Division of Random House, 1960.
- Chickering, Arthur W. Education and Identity. San Francisco, Calif.: Jossey Bass, Inc., 1969.

- Combs, Arthur W., and Snygg, Donald. <u>Individual Behavior</u>. New York: Harper & Bros., 1959.
- Dewey, John. Experience and Education. London: Collier-Macmillan Co., 1969.
- Doll, Ronald. <u>Curriculum Improvement: Decision Making</u> and <u>Process</u>. Boston: Allyn & Bacon, Inc., 1966.
- Freeman, James; Christie, T.; and Butcher, H. J. <u>Creativity</u>. London: Society for Research into Higher Education, 1968.
- Gage, N. L. <u>Handbook of Research on Teaching</u>. Chicago: Rand McNally, 1963.
- Gardner, John. <u>Self-Renewal: The Individual and The Innovative Society</u>. New York: Harper & Row, 1963.
- Ghiselin, Brewster. The Creative Process. Berkeley: University of California Press, 1954.
- Hollander, Edwin, and Hunt, Raymond. <u>Current Perspectives in Social Psychology</u>. Oxford: University Press, 1967.
- Inlow, Gail M. The Emergent in Curriculum. New York: John Wiley & Sons, 1966.
- Jersild, Arthur T. When Teachers Face Themselves. New York: Columbia University, Teachers College Press, 1955.
- Kagan, Jerome. <u>Creativity and Learning</u>. Boston: Houghton Mifflin, 1967.
- Kelley, Earl C. Education for What is Real. New York: Harper & Bros., 1947.
- Kelley, Earl, and Rasey, Marie I. Education and the Nature of Man. New York: Harper & Bros., 1952.
- Lieberman, Myron. The Future of Public Education. Chicago: The University of Chicago Press, 1960.
- Maslow, Abraham. Toward a Psychology of Being. Princeton, N.J.: D. Van Nostrand Co., Inc., 1962.
- May, Rollo. Love and Will. New York: W. W. Norton & Co., Inc., 1969.

- May, Rollo. <u>Psychology and the Human Dilemma</u>. New York: D. Van Nostrand Co., Inc., 1967.
- , ed. <u>Existential Psychology</u>. Clinton, Mass.: The Orthopsychiatric Association, Inc., 1960; Random House, Inc., 1969.
- Montagu, Ashley M. F. <u>The Direction of Human Development</u>. New York: Harper & Bros., 1955.
- Morris, Van Cleve. Existentialism in Education. New York: Harper & Row, 1966.
- Murphy, Gardner. Human Potentialities. New York: Basic Book, Inc., 1958.
- York: Harper & Bros., 1961.
- Otto, Herbert A. Explorations in Human Potentialities.
 Illinois: Charles C. Thomas, 1966.
- Razik, T. A. Bibliography of Creativity Studies and Related Areas.
- Reed, E. G. <u>Developing Creative Talent</u>. Vantage Press, 1962.
- Rogers, Carl. <u>Freedom to Learn</u>. Columbus, Ohio: C. E. Merrill Publishing Co., 1969.
- . On Becoming A Person. Boston, Mass.: Houghton Mifflin, 1961.
- Roslandsky, John D., ed. <u>Creativity: A Discussion At</u>
 <u>The Nobel Conference.</u> New York: Fleet Academic Editions, Inc., 1970.
- Rugg, Harold. Imagination. New York: Harper & Row, 1963.
- Taylor, Calvin W. <u>Creativity: Progress and Potential</u>. New York: McGraw-Hill, 1964.
- ______, ed. <u>Utah Creativity Research Conference</u>.
 University of Utah Press.
- _______, and Barron, Frank, eds. <u>Scientific Creativity:</u>
 Its Recognition and Development. New York: John Wiley & Sons, Inc., 1959.

- Thelen, Herbert A. Education and the Human Quest. New York: Harper & Row, 1960.
- Torrance, Paul E. Gifted Children in the Classroom. New York: Macmillan, 1965.
- . Rewarding Creative Behavior. Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965.
- Wheelis, Allen. The Quest for Identity. New York: W. W. Norton & Co., Inc., 1958.
- Whitehead, Alfred North. The Aims of Education. New York: The New American Library of World Literature, Inc., 1949.

Articles

- Baker, B. F. "Existential Philosophers on Education." Educational Theory, (February, 1966), 216-24.
- Burns, R. W., and Ellis, B. M. "What is Creativity?" School Science and Math, (March, 1970), 204-6.
- Christie, T. "Environmental Factors in Creativity."

 Journal of Creative Behavior, (Winter, 1970), 1331.
- Damm, V. J. "Creativity and Intelligence." Exceptional Child, (April, 1970), 565-69.
- Day, David. "Creating a Climate for Creativity." School and Society, (Summer, 1966), 263-65.
- Estes, N. "Title III of ESEA Offers Encouragement for Innovation." National Education Association Journal, (December, 1966), 30-32.
- Goulet, R. R. "Cultivating a New Crop of Human Resources With ESEA Title III." (May, 1967), 49-52.
- . "PACE Projects to Advance Creativity in Education." National Elementary Principal, (February, 1967), 66-69.
- Hallman, R. J. "Creativity and Educational Philosophy." Educational Theory, (January, 1967), 3-13.

- Hearn, N. E. "PACE: Projects to Advance Creativity in Education." National Elementary Principal, (September, 1966), 50-52.
- Krippner, S. "Ten Commandments that Block Creativity." Education Digest, (January, 1968), 23-26.
- Kurland, N. D. "Better Local Use of Title III." <u>TIP</u>, (June, 1967), 150-53.
- Mueller, Richard. "Can The Public School Foster Creativity?" Saturday Review, (December 19, 1964), 47-53.
- Mullins, John. "Problems of the Individual in the Philosophies of Dewey and Buber." Educational Theory, (January, 1967), 76-82.
- Razik, T. "Recent Findings and Developments in Creativity." <u>TIP</u>, (October, 1966), 160-65.
- Taylor, Vi Marie. "Creativity and Image Perception."
 Unpublished Ph.D. dissertation, Michigan State
 University, 1965.
- Torrance, E. Paul. "Creativity." Education, (September, 1968), 27-30.
- . "Scientific View of Creativity." <u>Daedalus</u>, (Summer, 1965).
- _____. "Uniqueness and Creativeness." Educational Leadership, (March, 1967), 493-96.

APPENDICES

APPENDIX A

SUMMARY OF ESEA TITLE I11 PROJECTS FUNDED

IN THE STATE OF MICHIGAN

APPENDIX A

SUMMARY OF ESEA TITLE III PROJECTS FUNDED IN THE STATE OF MICHIGAN

EXTENDED CLASSROOM PROJECT (PLANNING)
Wyoming Public Schools
Project Number DPSC-66-2437

An extended classroom will be planned to supplement regular classroom activities. The extended classroom will include study carrels wired with earphones, math stations, science stations, and areas set aside for quiet and active programs. The room will be used for students who need further stimulation to maintain interest, special equipment, and remedial work. Quiet activities will be planned for easily distracted children or children with perceptual problems. Study carrels will provide taped, individual instruction; math and science stations will help both the slow learners and the talented students. Active programs will be planned for children who need training in large muscle coordination. The room can be used on individual, small-group and large-group bases and all stations will be portable. Approximately 300 students will be served.

WESTERN MACOMB RESEARCH AND EVALUATION CENTER (PLANNING)
Utica Community Schools
Project Number DPSC-66-1442

Four school districts will cooperate in using research findings to develop more meaningful classroom programs and related educational experiences. Plans will include staff development service, an area educational research and evaluation center, and programs for youth beyond the normal school day, year, and typical K-12 organization. Approximately 36,760 public and 4,570 nonpublic school students and 19,073 preschool children will be served.

CREATIVE AND SOCIODRAMATIC SUPPLEMENTARY EDUCATIONAL AND CULTURAL ENRICHMENT SERVICE (PLANNING)
Troy City School District
Project Number DPSC-66-2441

An extracurriculam program in creative dramatics and sociodrama will be planned to enrich the language skills curriculum. Plans will include the training of a group of creative dramatics and sociodrama leaders, the use of community resources, and the use of a university center to test and train volunteers from the college as candidates for creative dramatics and sociodramatic leadership positions. Approximately 5,300 students in grades K-12 will be served initially and 256,107 students eventually.

PROJECT APES: APPROPRIATE PLACEMENT FOR EXCELLENCE (PLANNING)
Trenton City Public Schools
Project Number DPSC-66-1691

A summer seminar will be conducted where teachers will develop plans for a model ungraded phase-elective English course of study to be used in an established, traditional secondary school. Emphasis will be given to the use of new instructional methods and materials and the placement of students in appropriate classes. Provisions for continuing research within the course of study will be included. Approximately thirty teachers and 3,000 secondary school pupils will be served.

DYNAMIC MULTIPHASE AREA WIDE DATA PROCESSING CURRICULUM (PLANNING)
Traverse City, Traverse Bay Intermediate District Project Number DPSC-66-2524

Vocational training in data processing will be planned to raise the occupational capabilities of students in a rural area. Plans will include the investigation and development of a centrally coordinated, multiphase data-processing curriculum to fill the needs of the students. Approximately 7,000 students from nineteen high schools and a community college will be served.

COMPREHENSIVE AREA STUDY TO DEVELOP A LONG-RANGE PLAN OF INTEGRATION INTO COOPERATIVE EFFORTS OF ALL FEDERAL PROGRAMS AND COMMUNITY RESOURCES (PLANNING)
Sault Ste Marie Public Schools
Project Number DPSC-66-1046

Needs will be determined and programs planned to serve students in a remote, sparsely populated area. Plans will include: (1) transportation of pupils, supplies, and mail, (2) such comprehensive educational services as counseling, remedial instruction, health, recreation, social work, and other services incidental to the community's welfare, (3) adoption of new and improved educational programs including foreign languages, science, and other areas of interest, (4) educational television, radio, and communications, and (5) mobile education services and such community resource activities as library services and the use of specialists for lectures and demonstrations. Approximately 5,000 public and nonpublic school students in grades K-12 will be served.

PLANNING A DEMONSTRATION SCHOOL USING INSTRUCTIONAL SYSTEMS DESIGN TO ALLOW AN INDIVIDUAL CURRICULUM FOR EACH STUDENT (PLANNING)
Saginaw Township Community Schools
Project Number DPSC-66-802

A demonstration school will be planned, using an instructional systems approach to permit an ungarded continuous-progress, individually paced program. The school will cover subjects traditionally taught in a graded, K-12 school. Primary instruction will emphasize the use of audiovisual media with most student time spent in an instructional technology area, not in a group with a teacher.

The organizational sequence of instructional components will be planned so each student can benefit from sequences and methods tailored to his own needs. Specific behavioral objectives will be developed for each subject-content area to serve as checkpoints for student and teacher during the student's progress through the individual curriculum. Information storage and retrieval systems will be included for instructional and school accounting purposes. Approximately 5,989 students will be served.

SAGINAW COUNTY INSTRUCTIONAL MATERIALS CENTER (PLANNING)
Saginaw County Intermediate School District
Project Number DPSC-66-891

Supplement and expand services currently offered by an audiovisual center to all school districts in the county. Plans will be made to enrich the academic curriculum, improve guidance services, offer information on cultural events, and plan field trips. Audiovisual and other instructional materials, equipment, and exhibits will be prepared and distributed by the center. Inservice training will be given to teachers in the preparation and use of materials. Approximately 60,987 students will be served.

PROPOSAL TO DEVELOP A PLAN FOR A SUPPLEMENTARY EDUCATIONAL CENTER AND SERVICES (PLANNING) Roscommon C.O.O.R. Intermediate Board of Education Project Number DPSC-66-1710

Representatives of twelve counties will survey present school and community programs, investigate exemplary programs, and plan new programs to meet the needs of a sparsely populated rural area. Plans will include: (1) comprehensive guidance and counseling services, (2) special educational programs for the gifted, the slow learner, and the handicapped, (3) school health programs, (4) summer programs, (5) cultural-enrichment, (6) special home study courses, (7) educational television and radio, and (8) visiting teacher programs. Approximately 29,400 students and 600 administrators and teachers will be served.

PLANNING A HIGH SCHOOL PROGRAM FOR ACADEMICALLY GIFTED PUPILS (PLANNING)
Port Huron Area School District
Project Number DPSC-66-1568

An individualized high school program will be planned for the academically gifted youngsters. The program will provide for various approaches to learning, including: (1) independent study and research, (2) the writing of comprehensive examinations in lieu of taking certain courses, (3) acceleration of the high school program, (4) participation in college courses at a nearby college, (5) participation in Operation Headstart and other activities with minority groups, and (6) cultural enrichment through the use of community resources in arts, a museum, and theater arts. Summer workshops and inservice training will be planned to prepare

the staff for working with the gifted child in a semitutorial role. Approximately 200 gifted children will be served.

OAKLAND COUNTY MATHEMATICS PROJECT (PLANNING) Pontiac Oakland County Schools Project Number DPSC-66-1860

A mathematics program will be planned to help high school terminal students meet the requirements for successful entry into the vocational, military, and civic fields. The program will consist of four years of mathematics experience offered on an elective basis to both the terminal and college-bound student. An advisory vocational panel consisting of representatives from industry, labor, and the military will furnish the mathematical requirements of their respective fields. Academic consultants will work with planning staff members on specific areas of program development. Approximately 25,000 high school students will participate.

OAKLAND COUNTY EDUCATIONAL MEDIA STUDY (PLANNING) Pontiac Oakland County Schools Project Number DPSC-66-1043

Educational needs will be determined, a comprehensive survey of community resources will be taken, and programs recommended to serve all students in the county. Services and facilities under consideration indluce centralized information centers, film libraries, museums and cultural centers, planetarious, video tape equipment, personnel facilities, mobile units, closed-circuit television, and inservice training programs. A central file of information on available resources will be stored on data processing equipment. After reviewing civic, industrial, educational, cultural and human resources, specific programs will be recommended. Approximately 250,000 students will be served ultimately.

EXEMPLARY PROGRAMS IN LANGUAGE ARTS (OPERATIONAL) Pontiac Oakland County Schools Project Number DPSC-66-984

Special language arts programs will be instituted in every school district in the county. Each program will be staffed by a person or persons specially trained to provide one or more of the following services for children of average ability who are behind in language arts--diagnosis, clinical remediation, speech improvement, and reading instruction. It is anticipated that between 10 and 20 percent

of the students will need the assistance. Selected teachers will be given eight weeks of inservice training at a "graduate practicum" to improve language development programs, learn new instructional methods and diagnostic techniques, and acquire skills to work effectively with students. Five model programs have been developed and one or more will be used by each district. The five programs include learning improvement programs for grades K-3, 4-6, and 7-9, and extensive reading programs for junior and senior high school students, and a speech improvement program for the secondary students. Approximately forty five teachers will participate in the eight-week inservice program and 300 will attend orientation seminars. Between 500 and 3,000 students are expected to benefit the first year out of a total enrollment of 247,064 students.

HOUSE PROJECT (OPERATIONAL)
Painesdale Adams Township School District
Project Number DPSC-66-1500

A two-story house will be remodeled by a class of fifteen educable mentally retarded boys, ages 16 to 19. The project should provide the students with on-the-job responsibilities and employable skills. The students will be taught to adhere to rules and work with others. Reading, math, and social studies will be integrated into the construction. Some time will be used for teaching of academic subjects. Each student will be given some incentive pay to give him a feeling of actual job benefits and to gain experience in using money.

AREA DEVELOPMENTAL READING CENTER (PLANNING) Muskegon Area Intermediate School District Project Number DPSC-66-1131

A reading center will be planned to assist parents, teachers, and administrators in attacking the causes of reading disability and improving the reading skills of approximately 51,157 public and nonpublic elementary and secondary school students. The center will provide a corrective or remedial reading program, help teachers become skilled in handling and developmental concept of reading within the context of the school program, and provide inservice training for teachers.

MATERIALS AND PROGRAM DEVELOPMENT AND EVALUATION CENTER PLANNING GRANT (PLANNING)
Mount Clemens Macomb County Intermediate School District Project Number DPSC-66-881

A countywide materials, program development, and evaluation center will be planned to serve 21 school districts. The center will be designed to serve as a laboratory for educators to evaluate current educational practices and to translate research findings into practical applications. Inservice training will be emphasized. Programs will be planned to use audiovisual aids, multilevel materials, flexible grouping practices, and programmed materials. Special attention will be given to needs in the areas of guidance, language arts, mathematics, research, science, social studies and testing. Building design will be a part of the planning, with space reserved for information retrieval, data processing, sound, and video services. Consultants in language arts, mathematics, science, and social studies will be hired to participate in the planning. Approximately 165,000 students will be served.

MENOMINEE AREA PUBLIC SCHOOLS INTERDISCIPLINARY, MULTI-MEDIA, TEAM TEACHING PROJECT FOR THE CULTURAL AND PSYCHOLOGICAL INTEGRATION OF SECONDARY CURRICULUM (PLANNING) Menominee Public Schools Project Number DPSC-66-2234

Plans will be made to improve the curriculum in grades 7-12 by using interdisciplinary, multimedia, and team-teaching approaches. Emphasis will be on giving secondary and adult-education students an understanding of the variety of cultures existing in the world, the impact of education on cultural change, and the interrelated significance of the disciplines included in the secondary curriculum. Teachers will be trained in team-teaching methods and the use of programmed instruction and audiovisual materials for large-group instruction. Periodic workshops will be scheduled for the teachers and experiments will be conducted in the preparation and presentation of trial lessons and units of instruction through the use of various media. Approximately 1,400 secondary students, 120 staff members, 100 adult education students, and 300 noncredit evening students will be served.

PROJECT EPIC. EDUCATIONAL PLANNING TO IMPROVE THE COMMUNITY (PLANNING)
Marshall Calhoun Intermediate School District
Project Number DPSC-66-933

An educational and information center will be planned to provide a central location from which community educational and cultural information could be disseminated. Programs to be considered include a series of seminars on educational and community planning and an ongoing information program to increase public awareness of educational programming, cultural activities, names of guidance personnel and school administrators, and other data. An educational research and development center and an electronic data storage and retrieval system may be developed. A long-term planning care committee for the physically and mentally handicapped and a permanent area council on educational planning may be organized. Approximately 45,000 school children and adults will be served.

PROPOSAL TO PLAN EXEMPLARY EDUCATIONAL PROGRAMS AND CENTER (PLANNING)
Manistee County Intermediate Board of Education
Project Number DPSC-66-1349

Seven counties will develop plans cooperatively to meet the needs of approximately 39,700 students in grades K-12, 10,000 preschool children, and 59,399 others. Programs to be considered include cultural programs, adult education, vocational education, an instructional materials center with inservice training, counseling and guidance services, remedial programs for the slow learners, accelerated programs for the gifted, complete curriculum offerings in small schools, health services, summer school programs, recreational and leisure time activities, and preschool programs.

INVESTIGATION OF THE SIGNIFICANCE OF PERCEPTUAL MOTOR DEVELOPMENT ON ACADEMIC ACHIEVEMENT (PLANNING)
Madison Heights Lamphere Public Schools
Project Number DPSC-66-2407

A perceptual-motor development program will be planned to help children who lack refined visual, auditory, and perceptual-motor skills. Ways to identify such problems at an early stage and methods of improving the skills will be explored. Plans will also include investigating the relationship between perceptual-motor development and the learning process and designing a program which can be

conducted in selected classrooms and will serve as a laboratory setting for inservice training. The pilot program will include perschool children, beginning students in kindergarten and first grade, and unsuccessful middlegrade students in third and fourth grade. A program will also be considered for mentally retarded students. The feasibility of using existing recreational facilities and services, parent education seminars, and a revised physical education curriculum to reinforce the program will be explored. Approximately 4,389 elementary and 1,600 secondary school children will be served.

PLANNING THE CHANGE PROCESS FOR INSTRUCTIONAL IMPROVEMENT IN ALL LIVONIA SENIOR HIGH SCHOOLS THROUGH THE USE OF INNOVATIONS IN TEACHING METHOD, TIME AND STAFF UTILIZATION, AND SCHEDULING (PLANNING)
Livonia Public Schools
Project Number DPSC-66-2551

Plans will be made for converting the instructional programs in four high schools to flexible organizations stressing individual instruction. The new programs will include flexible scheduling, team teaching, small-group discussions, seminar instruction, and independent study. Inservice workshops will be conducted for teachers to determine instructional objectives, to learn new teaching skills and techniques for working with a variety of large and small instructional groups, and to establish sequences in the content of subject-matter disciplines. Dataprocessing techniques will be used to schedule the instructional program. Approximately 12,500 students and 650 faculty members will be served.

TRI-COUNTY PYRAMID FOR EDUCATIONAL ADVANCEMENT (PLANNING)
Kalamazoo City School District
Project Number DPSC-66-1570

Schools in three counties will work cooperatively to plan a program. (1) It will include the use of educational, cultural, ethnic, economic, and potential resources of the community to improve student social understanding. Planners may consider compiling a resources directory, forming a miniature peace corps and student exchange programs, and scheduling musical and theater productions, field trips, and student-oriented showings at art centers. (2) A team of highly specialized personnel from the fields of medicine, psychiatry, psychology, social work, and education may diagnose and treat those students

with persistent learning disabilities. (3) Inservice education may be offered in the techniques of teaching, and instructional equipment suggested by researchers will be examined. (4) The establishment of instructional materials centers in locations accessible to teachers will be considered. (5) Other centers which may be established include study centers for adults, an after-school study area for students, a center where pregnant school girls can receive group education and a center where counseling services can be provided on a regular basis by community agencies. Approximately 2,265 teachers and 74,195 students will be served.

EXEMPLARY AND INNOVATIVE PRESCHOOL CHILD DEVELOPMENT DEMONSTRATION CENTER (OPERATIONAL)
Kalamazoo City School District
Project Number DPSC-66-2251

Four preschool classrooms will be operated as a demonstration center with emphasis on community and parental involvement. The center will provide a comprehensive educational program for selected preschool children and their parents. The goal will be to improve the children's chances of success in the elementary grades while strengthening the parents' ability to better assume their roles in the child's development. Parent education and guidance will be given in establishing a stable home. Community agencies will work with the center in helping individual families when needed. Some physically handicapped children will be enrolled in the program. Hot lunches will be served daily. The center will also be used by the city's junior and high schools and college classes as a laboratory for home economics, sociology, psychology, and human growth and development studies. Student teachers from a nearby university preschool course will have an opportunity to observe and teach at the center. Approximately 120 preschool students will be served.

UPPER PENINSULA MULTI-DISTRICT PLANNING PROJECT (PLANNING) Ishpeming School District Project Number DPSC-66-1397

A system will be developed for large-scale data collection of educational needs in a 15-county rural area. A pilot program will be conducted in three schools to test the suitability of a prototype of survey forms to be used in the data-collection program. A census will then be taken of all students in the 15 counties to determine prominent characteristics of the school setting which may

influence learning and to reveal patterns of under- or over-achievement. The census information will be analyzed and translated into action proposals to remedy educational problems. Approximately 40 school staff members will attend a 6-week summer program to learn data processing procedures, provide leadership in collection of data in the schools, and acquire the ability to interpret data for action proposals. Approximately 60,000 students, grades K-12, will be served.

COMMUNITY SCHOOL SERVICES: A DEMONSTRATION (PLANNING)
Ionia County Intermediate School District
Project Number DPSC-66-770

A community-school program will be planned to serve approximately 55,000 preschool students, students in grades K-12, and adults. Planning will include: (1) physical education programs for evenings, Saturdays, and summers, (2) a cultural program of science, art, and music for students and adults, and (3) summer recreation and education for the handicapped.

MUSIC THERAPY PROGRAMS FOR HANDICAPPED CHILDREN (PLANNING)
Hancock Copper Country Intermediate School District Project Number DPSC-66-1677

A music therapy program will be planned to help mentally, emotionally, and physically handicapped children of school age. Music activities will stress listening, singing and rhythmic exercises, dances and games, instrumental instruction, and correlation with other class activities. Existing therapy classes will be visited, procedures and materials decided upon, and a curriculum guide developed. The therapy program should provide opportunities for self-expression, social development through group participation, motor development through rhythmic activities, and aesthetic experiences to enrich the students' lives. Approximately 200 children will be served.

IMPROVING CITIZENSHIP AND ACHIEVEMENT THROUGH TEACHING VALUE ANALYSIS (PLANNING) Grand Rapids Northview Public Schools Project Number DPSC-66-2570

Improved student citizenship and achievement should result from a program planned to develop and create an awareness of the need to establish a framework of values for self and others with whom the students come in contact. One of the goals will be to enable students to increase the areas in which they can be guided by intelligence and conscience rather than by blind impulse, fear, or prejudice. The aims and purposes of the program include: (1) identification of values held by recognizable segments of the adult members of the community and groups of students in the school district, (2) comparison of adult and student values, (3) correlation between a student's values and academic achievement, and (4) compilation of information as to what influences student values. Approximately 500 students, grades 1-12, will be served.

DEVELOPMENTAL LANGUAGE AND SPEECH CENTER (PLANNING)
Grand Rapids Kent Intermediate School District Project Number DPSC-66-1196

Methods of communicating with parents of preschool children will be explored and the parents will be assisted in helping their children develop language and speech skills. Plans will include determining parental availability for preventive education, designing a format for information dissemination and a syllabus of the content and goals of this parent education program, and establishing procedures for evaluating the success or failure of the program. Approximately 5,200 perschool children and their parents will be served.

AREA LEARNING CENTER (OPERATIONAL)
Grand Rapids Kent Intermediate School District
Project Number DPSC-66-1343

A learning center will be established to serve all students, preschool through grade 12, who have learning problems. The center staff members will diagnose, write prescriptions, and follow through on children with learning problems. Inservice programs will be provided to help teachers translate learning principles into practice and work with problem children. Students will include those with reading problems, minor neurological impairments, slow learners, and the socially maladjusted or emotionally

disturbed. The center will be staffed by specialists with training and experience in language arts, psychology, child growth and development, and curriculum. The staff will also include prescription consultants who will be responsible for collecting data from schools and processing referrals after students' problems have been analyzed by the learning specialists. Classroom teachers will be involved on a continuous basis in the diagnostic and follow-through procedures. Approximately 30,614 students from schools in seven counties will be served.

PLANNING EXEMPLARY CENTER FOR EDUCATION OF DISADVANTAGED YOUTH (PLANNING) Grand Rapids Board of Education Project Number DPSC-66-826

Programs will be planned to help disadvantaged students in the transition from elementary to junior high school and to provide materials and activities to improve the students achievement levels. A curriculum information and analysis center will be established to study curriculum needs, develop new instructional materials, and design new programs. Plans will include a summer school for students where new practices will be tested and out-of-school resources will be used. The summer school will be followed by an evaluation program and a 6-week inservice program for teachers and final testing and revision of plans for instruction. Approximately 500 students will participate in the experimental program.

INTEGRATING OUTDOOR EDUCATION WITH A FLEXIBLE ACADEMIC-VOCATIONAL CURRICULUM (PLANNING) Grand Haven Board of Education Project Number DPSC-66-2582

An outdoor-education program will be integrated with the regular elementary and secondary curriculum to serve the academic and vocational needs of all students. Special attention will be given to terminal and marginal students and potential and actual dropouts. Academically oriented courses will be flexibly scheduled and modified to fit the needs of the marginal students and dropouts. Teachers will participate in inservice programs to plan The industrial arts program at the junior the courses. and senior high school levels will be coordinated with related work-experience activities. Sites will be developed for outdoor education of elementary students. Such activities as field trips, wildlife, planting, and school site beautification will be planned. Vocational pursuits will be developed in relation to the above program, including processing timber from logging to finished lumber, building with the finished lumber, and developing a wild-life pond. Courses in home and shop math, home and shop science, communication skills, and science will be planned to meet needs of every student. Approximately 6,037 students in grades K-12 from public and nonpublic schools will be served.

FIFE LAKE PIONEER VILLAGE MUSEUM (PLANNING)
Fife Lake Community School
Project Number DPSC-66-2457

A pioneer village museum will be planned to enhance the understanding of the local cultural heritage by students, grades K-8, in five counties. The pioneer village will be a replica of local life at the turn of the century. To be included are a pioneer home, store, and school, virgin forests, and primitive farming. Dioramas will be planned depicting Indian lore, language, modes of transportation, and every phase of pioneer life. Historical activities will be related to the school curriculum. Children will be encouraged to collect rocks, artifacts, and historical items, to research early governmental units, schools, and churches.

They will create authentic costumes, hairdos, and cookery, assemble picture collections of plant and animal life, make bulletin-board displays and scrapbooks, trace modes of transportation, and paint a mural of pioneer life. Field trips will be planned to Indian mounds and old trails in the area. Approximately 16,173 elementary and secondary students from public and nonpublic schools will be served.

PROFESSIONAL SERVICE PROGRAM (PLANNING)
Essexville Bay-Arenac Intermediate School District
Project Number DPSC-66-2508

A professional services program will be planned to provide assistance in guidance and counseling, diagnostic and visiting teacher services, psychological services, consultant services in curriculum and reading, and testing and computerized test scoring to public and nonpublic schools in 12 school districts. Guidance and counseling will be given special emphasis at the elementary level to identify, at an early age, the potential school dropout. Additional studies will be made to determine what benefits could result from a closer liaison between schools and industries in the three-county area and what steps could be taken to prepare rural students for the transition to

life and work in urban and suburban areas. Approximately 1,620 school professionals and 42,450 elementary and secondary students will be served.

SPARTAN VILLAGE SCHOOL PROJECT (PLANNING) East Lansing City School District Project Number DPSC-66-1523

A learning resources laboratory will be planned to supplement an existing demonstration classroom which is used for inservice training purposes. The laboratory will serve as an elementary library and materials center. Space will be allotted for book and reference areas, a television producing and recording area, an audiovisual room, a new media area, work space for teachers, and a computer-based information storage and retrieval system. Provisions will be made for connecting the television system to a closed-circuit network on a state university campus and to schools in the three-county area. mately 3,513 elementary teachers, principals, curriculum directors, librarians, audiovisual specialists, and college students majoring in elementary education should benefit from inservice and preservice activities.

PILOT OF EDUCATIONAL AND CULTURAL NEEDS OF WAYNE COUNTY, MICHIGAN, FOR THE PURPOSE OF PLANNING THE COORDINATION AND EXTENSION OF SUPPLEMENTARY EDUCATIONAL SERVICES (PLANNING)
Detroit Wayne County Intermediate School District Project Number DPSC-66-1282

The feasibility of coordinating and extending existing educational and cultural resources to serve students better in a metropolitan county will be explored. Specific suggestions to be considered include: (1) determining ways to produce and use new instructional materials and to "package" creatively new and existing materials, (2) establishing a communications network to disseminate information on new practices and eliminate duplication of effort, and (3) planning inservice training programs, including workshops, teacher exchanges, internships, and team arrangements. Traveling resource teachers may be used to provide supplementary services to several school districts. Planners will also explore the possibility of a data processing center for business and instructional purposes. Planners will study programs within and outside the county before making final recommendations for operational projects. Approximately 702,285 elementary and secondary students and 22,176 teachers will be served.

INCREASING THE NUMBER AND ORIGINALITY OF EDUCATIONAL AND CULTURAL INNOVATIONS IN WAYNE COUNTY (PLANNING)
Detroit Wayne County Intermediate School District

The number, effectiveness, and originality of educational innovations in a countywide area should be increased through the planning and implementation of two projects. The projects are: (1) a chair for educational innovation, and (2) a consortium for advanced educational thinking. Data will be obtained so that the strengths and weaknesses of the two approaches can be analyzed and the relative impact of each project ascertained. major sources of data will be educators, project participants, business and industry resource people, and the project professional staff. The objective of the chair program will be to stimulate innovative and creative thinking, to increase the number of innovative practices in the schools, and to stimulate evaluation and selfeducation of practices by school leaders. The objectives of the consortium will be to assault problems through mobilizing the "know-how" of outstanding thinkers, to produce a pool of creative ideas, research problems, projects, and exemplary educational programs and innovations, and to stimulate originality in local school leaders. Approximately 22,000 teachers and 707,000 school children will be served.

CULTURAL ENRICHMENT (PLANNING)
Detroit Board of Education
Project Number DPSC-66-25-2

Professional cultural leaders and educators will plan a comprehensive blueprint to utilize the available professional talent in cultural and artistic fields of the community to develop cultural-enrichment programs for the students. The planners will attempt to find new methods of approach in the development of the programs. Panels will be established to study needs in seven disciplinary areas--literature, drama, history and social sciences, visual arts, music, dance and science and technology. A panel review committee will decide which cultural needs are most imperative and recommend programs to meet the needs. Approximately 380,000 students will be served.

HOME STUDY CENTERS (PLANNING)
Dearborn Heights School District 7
Project Number DPSC-66-1796

Home study areas will be planned which will provide a place where students can do school assignments after school and in the evening. The centers will be located at each of four elementary schools and one high school. Each center will be planned around a school-library concept and will be equipped with the necessary instructional materials. Local high school and college students will provide individual help to students under the supervision of a certified teacher. The possibility of having a counselor available in each of the study centers one evening a week will be studied.

OUTDOOR EDUCATION LABORATORY (PLANNING)
Constatine Public Schools
Project Number DPSC-66-2237

An outdoor education laboratory will be planned to teach students the principles of conservation and to instill in them a sense of civil responsibility concerning the land and its associated resources. Planners will visit similar outdoor-education sites and will prepare a working scale map of the site selected for the program. The site will be developed for basic research in ecology or environmental biology, including a soil conservation area with experimental plots to be operated by students, one or two small ponds for ecological studies, and a bird-study area. Such natural features as trees, fences, rock and brush piles, and roads will be supplemented with planting, ponds, and nature trails. Approximately 3,200 persons will be served, including students, grades K-12, teachers, and community residents.

EXPLORING NATURE'S CLASSROOM (OPERATIONAL)
Coldwater City School District
Project Number DPSC-66-1291

A year-round outdoor-education program will be established and a center to house auxiliary functions will be acquired. A weather station, bird feeders, beehives, catch basin, rock wall, grass waterway, a rock dam, and other study tools will be installed in addition to nature trails, graden plots, soil profiles, a benchmark, a sundial, and desert, field, and swamp habitats. They will be used for the study of conservation, plant disease, and geology and other natural sciences. Each item will have a relation-ship to the curriculum since the program is planned as an

outdoor classroom, not as a museum. A telescope viewing area will be devoted to astronomy studies and a conservatory, or nature center building, will serve as an orientation center for the entire site and provide workspace for visitors, housing equipment, a reference library, and a plant propagation area. Inservice training sessions will be scheduled to orient teachers. Specific projects will be scheduled each month for different grade levels and for different seasons of the year. Approximately 12,200 students, grades K-12, from public and nonpublic schools and 550 teachers will be served.

OUTDOOR EDUCATION-CONSERVATION AND RURAL LIFE REGIONAL CENTER (PLANNING)
Charlotte Eaton County Intermediate Board of Education Project Number DPSC-66-1553

Plans will be made for an outdoor education, conservation, and rural-life, regional center to serve students in a tri-county area. The program will provide opportunities for learning about natural resources at a time when urbanization is rapidly removing such opportunities. The program will include a laboratory for preservice and inservice education of teachers. Learning opportunities will be identified and related to appropriate phases of the school curriculum. Approximately 93,000 students from public and nonpublic schools, grades K-12 including handicapped students, and 4,000 teachers will be served.

PROPOSAL TO DEVELOP A PLAN FOR EXEMPLARY EDUCATIONAL PROGRAMS (PLANNING)
Caro Tuscola Intermediate School District Project Number DPSC-66-1558

Educational programs will be planned to provide: (1) guidance and counseling, remedial instruction, and school health, physical education, recreational, psychological, and social-work services to help dropouts and potential dropouts, (2) academic services and vocational guidance and counseling for continuing adult education, (3) special education for the physically handicapped, (4) cultural programs using artists and musicians, (5) mobile educational services and equipment, (6) home study courses, (7) radio and television instruction, and (8) visiting teacher services. Approximately 33,000 students in grades K-12 and 77,000 adults and other persons will be served.

DEVELOPMENT OF A CURRICULUM MODEL OF AN EXEMPLARY PROGRAM IN PHYSICAL EDUCATION (PLANNING)
Battle Creek City School District
Project Number DPSC-66-2405

A sequential physical education curriculum will be planned for grades K-12. An information retrieval system will be set up to bring together research data relative to physical education and a resource library will be developed to house this information. Four curriculum trends will be studied, including graded-activity curriculum studies, physical fitness studies, content studies, and unified studies (relates physical education experiences to the total educational picture). The new curriculum will be tested in different types of school settings and new procedures for training teachers will be tried out. interrelationship of physical activity to growth and development, health and fitness, and society and culture will be considered. Approximately 12,345 elementary and secondary students from public and private schools will be served.

PLANNING PROPOSAL TO DEVELOP THREE PROTOTYPE DEMONSTRATION CURRICULUM CENTERS AND ASSOCIATED STAFF (PLANNING) Ann Arbor Board of Education Project Number DPSC-66-927

Three demonstration centers will be planned to improve modern language education. One center will use team teaching study. Language will serve as a vehicle for instruction in music, art, and social studies to give students a better understanding of foreign cultures. second center will be for the development and conservation of bilingual and bicultural resources in the schools, with programs designed to strengthen the self-image of non-English speakers as representatives of their own culture. The third center will be a learning laboratory (not to be confused with a language laboratory), using an individualized approach to modern language learning. vidual study carrels will be equipped with tapes, records, films, programmed materials, and other audio and visual The laboratory will serve advanced and remedial students and the disadvantaged students who have special learning difficulties. Curriculum will be prepared for all three demonstration centers and integrated with other course work. Staff members will be trained to operate the centers and teachers will be exposed to such techniques as programmed learning, independent learning, and the use of oral study materials for slow readers. Approximately

200,000 students, the total public and private school enrollment in the state, will be served.

PUPIL PERSONNEL SPECIAL SERVICES CENTER (PLANNING)
Lansing School District
Project Number DPSC-66-2921

A center will be planned to coordinate personnel services for all students in the district. The center will serve as a clearinghouse for services available through school and community agencies. A team approach will be used which will involve school social workers, nurses, school psychologists, speech correctionists, consultants for the mentally retarded and emotionally disturbed and consultants from community agencies. Earlier and more accurate identification of the needs of children will be stressed. The main objectives will be to promote the general well-being and mental health of children. The clearinghouse arrangement should eliminate duplication and provide for more effective use of available services.

TEAM APPROACH IN THE AREA OF SPECIAL SERVICES (OPERATIONAL)
St. Johns Public Schools
Project Number DPSC-67-3477

A model program will be established to assist the atypical child in developing an adequate self-concept. service team, headed by a project director and composed of the Elementary School Counselor, the school social worker, and the school nurse will cooperate in an integrated approach to improving the individual student in four primary need areas: (1) personal adjustment, (2) social adjustment, (3) physical factors, (4) home factors. During the first phase of the program the project director and some team members and steering committee members will visit programs of related nature, both instate and out-of-state. During the next phase a model program will be established in two A central referral system will be established, and all referrals will be sent to the elementary counselor. The individuals will be given objective measurement tests of attitude, personality, and behavior. Weekly meetings for the entire team will be established to conduct continuous evaluation of the students and the program. rental involvement and individual conferences with students will be stressed. Inservice training for classroom teachers will be provided. Approximately 250 public and nonpublic school students will participate.

PROFESSIONAL GROWTH CENTER TO SERVE JACKSON AND HILLSDALE COUNTIES (PLANNING) Jackson County School District Project Number DPSC-67-2964

A professional growth program will be developed for the schools in two counties. Problem areas affecting professional growth will be recommended by individuals or schools for study by subcommittees. The subcommittees will develop pilot projects to test solutions. Each pilot project will be selected on the basis that it is a major concern which is common to other schools. The anticipated solution must represent an approach new to the area. Some projects will be used for demonstration purposes and some projects will be selected for operation proposals. Teachers will be given release time to attend sessions on identifying inservice and instructional media needs. The teachers will be organized into curricular groups, such as social studies teachers, quidance counselors, and reading teachers. Approximately 1,789 teachers and 44,610 students, grades K-12, in public and nonpublic schools will be served.

STUDYING THE CONTRIBUTION OF PARAPROFESSIONALS AND PLANNING FOR THEIR RECRUITMENT, SELECTION, TRAINING, AND USE IN WAYNE COUNTY PUBLIC AND NONPUBLIC SCHOOLS Detroit Wayne County Intermediate School District Project Number DPSC-67-2998

A study will be undertaken to determine what aspects of a professional's task can be performed by paraprofessionals. The nature and extent to which paraprofessionals are being used by public service organizations will be explored and the potential contributions which such employees could make to the schools will be ascertained. Problems related to recruitment and training of paraprofessionals will be studied and procedures will be developed for placement of such individuals. School systems which make extensive use of paraprofessionals will be visited. The effective use of paraprofessionals should provide students with more individual attention, assistance in adjusting to the classroom environment, psychological support through association with nonthreatening and nonjudgmental adults, and adult behavioral models with whom the students can identify. Approximately 708,075 students and 27,947 teachers will be served.

PLANNING A HUMANITIES PROGRAM (PLANNING) Bellaire Public Schools Project Number DPSC-67-3041

A humanities course will be developed for high school Planners will observe high school and university students. humanities programs and review available printed, visual, and recorded materials. The grade levels at which students can best comprehend the interrelationships of art, music, and literature will be determined. The advisability of extending some phases of the humanities program into the elementary grades will be explored. A spirit of critical inquiry will be encouraged in the course. Moral and philosophical issues related to the humanities will be A flexible scheduling plan will be developed to enable more students to take the course. During the final 16 weeks of planning, a pilot program will be conducted to experiment with ideas and techniques. tools will include a large number of films. Approximately 40 students in grades 11 or 12 will participate in the pilot program and 32 staff members will be involved in teacher training aspects.

READING LABORATOY FOR APPLIED INNOVATION (PLANNING)
Corunna Shiawassee Intermediate School District Project Number DPSC-67-3042

A reading laboratory will be planned to serve students with reading difficulties and to provide an environment where teachers can practice using new methods for application in their own classrooms. Emphasis will be given to the early identification of the causes of reading difficulties and the prevention of secondary problems -emotional disturbances, academic retardation, and social maladjustments. The program will be most concerned with difficulties not often treated in remedial reading programs, such as sensory perception, visual-motor coordination, and orientation. The more often recognized causative factors will also be diagnosed and treated, including visual, auditory, and speech impairments. The reading laboratory will be operated during the planning stages as a pilot project. The project will consist of three 8-week sessions when 48 children and 12 teachers will participate in reading readiness activities designed specifically to improve preacademic skills. Reading specialists will direct the program. Approximately 4,000 students will be served, plus 1,000 teachers.

DEVELOPMENTAL LANGUAGE AND SPEECH CENTER (OPERATIONAL)
Grand Rapids Kent Intermediate School District Project Number DPSC-67-3053

A developmental language and speech center will be (1) to educate parents of preschool children established: in language development so that fewer children will enter school with speech problems, (2) to educate early elementary teachers, nursery teachers, and guidance personnel in ways to help children develop better speech, and (3) to provide a counseling and child evaluation service for parents of preschool children with speech problems to determine what changes and/or activities will be necessary to help the children. Emphasis will be on prevention rather than correction. Parent workshops will be conducted in neighborhood locations. Parents will be taught specific skills, techniques, and activities effective in helping children talk. Parents who have specific problems will be offered individual counseling. Special workers, speech therapists, the staff of a child guidance clinic, visiting teachers, and others will be involved in the program. The center staff will also be available to parents at any time following the group workshops. Objectives are to facilitate speech development, to create in children a greater confidence in talking, to educate parents on speech problems, to train teachers, and to reduce problems related to language development, articulation, organic disorders, and stuttering. Approximately 2,000 students, 4,000 parents, and 501 teachers will participate.

SHARED LEARNING EXPERIENCES PROGRAM (OPERATIONAL)
Detroit Wayne County Intermediate School District
Project Number DPSC-67-3061

A shared learning-experience program will be instituted where children and teachers from one school district will be teamed with children and teachers of a different racial background in other districts. The participants will plan for and share meaningful educational experiences. Purposes are: (1) to develop new curriculam emphases, methods, and materials, (2) to encourage creativity and improve skills of communication, self-direction, and selfevaluation, (3) to develop better self-concepts, and (4) to develop a multiracial, multicultural learning environment to help children live effectively in an integrated society. Approximately 35 teachers will participate in a 2-day workshop to plan units of study, classroom and field trip activities, parent and community involvement, and evaluation methods. Shared learning experiences

which have already been tried on a pilot basis include a program where suburban and city students exchange letters and then meet for community tours in both areas and a day in a park. A second project involved an exchange of fourth-grade teachers, a pen-pal program, a study of natural resources, and a field trip. Approximately 3,235 elementary and secondary students and 175 teachers will participate directly.

OPERA OVERTURE CULTURAL ENRICHMENT PROGRAM (PLANNING) AND CURRICULUM SUPPORT Alpena Public Schools
Project Number DPSC-67-3066

201

A curriculum will be planned to introduce upperelementary and secondary students to opera as a form of culture, entertainment, and musicology. An opera overture will be prepared and produced in English to give students experiences in a full-scale operatic production, preparation of sets, rehearsals, and related activities. A schedule of performances will be prepared and community groups will be organized to promote the program throughout the 21 school districts involved. The purpose will be to develop a curriculum that will fit into the scheduled yearly program, prepare students for the professional production, and help the students evaluate their perceptions and experiences. The program should not have the drawbacks of typical one-day performances which lack continuity, preparation, and followup. Approximately 95,000 public and parochial school students and 75,000 adults will be served.

UPPER PENINSULA EDUCATIONAL SERVICE CENTER FOR ACTION PROJECTS (OPERATIONAL) Rudyard Upper Peninsula Intermediate School District Project Number DPSC-67-3127

Consultant services will be provided to 120 school districts in 15 counties by specialists from a state university. The specialists will work with individual schools to help solve problems. Services will include curriculum assessment, organizational consulting, proposal writing, personal evaluation, efficient school plant use, public relations, and coordination of agency activities on problems affecting education. Services will be offered by 2 groups of consultants. The first group will consist of a traveling team or task force that will be available to individual superintendents upon request to do school wide or district wide studies and recommended improvements. The second group will consist of the assignment of a district

consultant to each of the intermediate superintendent's offices. The consultant will be knowledgeable about local, state and federal services and assistance programs so that he can write proposals himself and coordinate the activities of several agencies. A training program will be instituted to familiarize the task force and district consultants with support programs, education-related research in sociology and psychology and social welfare practices. A training program will also be scheduled to inform representatives of local and state service and assistance agencies. Approximately 79,847 elementary and secondary students will be served.

LANGUAGE FOR DEAF CHILDREN THROUGH PARENT EDUCATION (OPERATIONAL) Flint Board of Education Project Number DPSC-67-3516

A home training program will be offered to parents of children with severe hearing losses. The children will include infants to school age. The program will emphasize early identification, early learning approaches, and psychological adjustment. The facilities and resources of a school for the deaf, a day school for exceptional children, a children's health center, a mental health clinic and similar agencies will be used for a teach approach in organizing and carrying out the parent education program. The objective will be to prevent or minimize language deprivation. Such an objective requires a program of action beginning in the early months and years of life since early perceptions affect all future learning. Approximately 10 trainees will be selected to spend one-half of each day in inservice training and the other one-half making visits to the homes of 50 children and their parents selected for the program. The trainees will counsel and demonstrate to the parents various educational methods useful in helping deaf children. struction and demonstration will be personalized according to each family's abilities to develop a learning environment through a "do-it-yourself" approach. Multisensory approaches will be used when more than one learning problem is involved.

OPERATING A COMPREHENSIVE INSTRUCTIONAL MATERIALS CENTER FOR SAGINAW COUNTY (OPERATIONAL)
Saginaw Intermediate School District Project Number DPSC-67-4285

An instructional materials center will be established to serve 13 school districts in one county. addition sub-centers will be located in district offices and individual school buildings. Building leaders will be trained to assist teachers in finding materials and using equipment. The leaders will be kept informed on the main center's services and programs. Demonstrations will be conducted in the production and use of materials and new instructional techniques. A distribution system will be devised to circulate materials from the main center. Emphasis will be placed on: (1) the professional use of verbal, auditory, and visual forms of communication to bring about constructive change in student understanding, attitude, and behavior, (2) new methods of instruction which facilitate learning, (3) instructional systems development procedures, and (4) central cataloging, filing, and purchasing of equipment and materials. A book-type catalog will be printed for every teacher. A file of key-punched cards will be developed so annotations can be created for the catalog by automated procedures. Film, filmstrips, tape and disc recordings, art print and sculpture reproductions, transparencies, biological studies materials, projectors, and other materials and equipment will be purchases for the program. Approximately 61,029 students grades K-12, preschoolers, and adults will be served and 2,439 teachers will receive inservice training.

INTEGRATED EDUCATIONAL INFORMATION SYSTEM (OPERATIONAL)

Mount Clements, Macomb County Intermediate School District Project Number DPSC-67-4475

An integrated educational information system will be developed and operated to serve 93 school districts in three counties. Standardized formats will be set up to facilitate effective collection, storage, and retrieval of information. In addition, interpretive services will be provided in connection with data submitted. Systems will be developed for a computer-enriched curriculum, financial management, pupil personnel records, staff personnel records, and facilities and equipment. School personnel will be trained to interpret and use the system for computer-assisted instruction and record-keeping purposes. Comparative information on age, sex, health records, and other factors will be available to the districts.

The system will provide a mechanism by which several districts can approach mutual problems, such as the development of a standardized student numbering system for continuity of student records and easier transferring by students from one district to another. Approximately 1,150,000 students, 43,000 teachers and 25,000 noncertified personnel will be served.

TRANSITION FROM A TRADITIONAL HIGH SCHOOL CURRICULUM TO AN INNOVATION PROGRAM BASED ON THE TRUMP PLAN (PLANNING)
West Branch, West Branch-Rose City Area School Project Number DPSC-67-4106

A program will be planned to effect a transition from a traditional high school curriculum to a highly flexible plan. The program has been named the Trump Plan in honor of its founder. The major elements of the Trump Plan include team teaching, large-group and small-group instruction, independent study, flexible scheduling, a multimedia approach to learning, and five independent study areas--learning resource centers, a library, conference rooms, a student lounge or informal study area, and a formal study area. The learning resource center has been defined as a subject-oriented study area furnished with materials and equipment needed for study in its particular discipline. The entire staff of 30 teachers will be involved in inservice training, consisting of three trimesters of college courses to be offered after school hours through university extension. The first course will be philosophy and methodology, and the two subsequent courses will be workshops. Extensive travel and visitation of similar programs in other counties and states will be planned. The program will cover one rural county with one school district. Approximately 1,000 students are enrolled in grades 7-12.

YPSILANTI EARLY EDUCATION PROGRAM (OPERATIONAL)
Ypsilanti School District
Project Number DPSC-67-4249

An early education program will be developed in an urban area for economically disadvantaged children below kindergarten age level. A preschool curriculum oriented toward Piaget's concepts will be developed to provide:

- (1) a solid foundation for further cognitive development,
- (2) a model for curriculum change in school system, and
- (3) an exemplar school experience, with new approaches to parental involvement, for disadvantaged children. A preschool center will be established with 10 classes for

2422000

100 four-year-olds taught by trained teachers assisted by The program will consist of a daily three-hour class and a biweekly visit to the home of each child by the teacher. Emphasis will be placed on development of the child's intellectual abilities in addition to the nurturing of his social and emotional growth. During the home visit, the teacher will conduct a tutorial session with the child, focusing on his particular cognitive needs. The mother will be encouraged to observe and participate in the session in the hope that she will come to understand the educative process and will continue fostering her child's growth when the teacher is not present. The aide will provide babysitting service, if needed, to free the parent for intensive work with the child. Parent group meetings will be held, emphasizing healthy child-rearing practices for the child's emotional, social, and cognitive development. Group discussion will focus on the parental role in the development of an internal locus of control within the child, its effect on motivation to achieve, and the use of reinforcement procedures to insure its maintenance.

COMPREHENSIVE EDUCATION PLAZA AND SUPPLEMENTARY SERVICES CENTER (PLANNING) Sault Ste Marie Public Schools Project Number DPSC-67-4311

Long-range planning will be conducted to develop a community educational park which will centralize educational activities and provide total comprehensive and vocational services to students and adults in a threecounty area. Planning consultants will work with educational and civic groups to: (1) prepare a master plan for an educational plaza, (2) draft educational specifications and space needs for a supplementary services center to service the plaza and all public and nonpublic educational programs in the area, and (3) coordinate all federal and nonfederal srouces of funds for developing the plaza and the total program encompassed within it. A complex will be planned on a 250-acre site to include the supplementary services center, a community comprehensive high school, a vocational area center, parttime services for nonpublic schools, a conservation demonstration area, an outdoor recreational activities area, civic and cultural activities centers, and an adult education center. Study groups will be set up to review planning goals in relation to inventories of community resources, site potential, financial resources, curriculum, and community needs. Educational specifications will be drafted by a team of qualified teachers from participating public and nonpublic schools. The educational specifications of the community school, the vocational school, and the nonpublic school will be correlated to provide total services to all. Approximately 22,000 students and adults will be served.

PROJECT GENESIS (OPERATIONAL)
St. Clair Shores, Lakeview Public Schools
Project Number DPSC-67-3522

392

A preventive-type program will be instituted to identify exceptional children prior to entry into kindergarten and to program individually for their needs. programs will be conducted in two schools for one year. The children will include those with any type of mental, physical, or emotional handicap and those with exceedingly high intelligence or extraordinary skill in a given area. Physical disabilities will include speech and hearing problems, neurological or orthopedic handicaps, cardiac conditions, chronic illnesses, and other physical difficulties. Learning disorders of a motor perceptual, or conceptual type will be diagnosed. Children with inadequate experiential backgrounds and social incompetencies will also be helped. Clinicians -- diagnosticians, social workers, speech corrections, and nurses--will diagnose each child's problems and recommend to the teacher the types of activities that would be of most benefit to the child. Expectations of achievement will also be given. Individual and group counseling sessions will be scheduled to educate paretns on child growth and development. staff member will be assigned responsibility for outlining and following up a child's program. Teachers will be given inservice training and consultant advice. mately 200 children will participate from two school districts in the county.

INDICOM-INDIVIDUAL COMMUNICATIONS SYSTEM (OPERATIONAL)
Pontiac, Waterford Township School District
Project Number DPSC-67-4301

A computer-based individual communications system will be developed to individualize learning for students in a metropolitan area. A large-scale computer will be procured and multisensory student consoles installed in one elementary and one secondary school. Programmed instructional units will be developed in several subject areas at the elementary and secondary levels by school faculty and staff. Video pictures, line drawings, and written text will be presented from the computer to each console via a television display tube, a graphic tablet,

and a keyboard communication mechanism. Auditory materials will be recorded on magnetic tape and played back under computer control through earphones, either simultaneously with the visual material or independent of it. The consoles will have provisions for tape recording materials and for replaying them through the earphones. responses will also be recorded and used to control the presentation of programmed material. Information will be entered into the computer system by typing it out on the console keyboard or by writing it on a graphic tablet with an electronic stylus. The computer will be capable of recognizing which of several alternative answers has been chosen, of comparing drawings, and ultimately of recognizing handwritten characters and words. During the first operational year major emphasis will be placed on inservice staff training, development of instructional units, and initial equipment procurement. During following years, additional consoles will be procured and the preparation, testing, and usage of instructional units continued. Approximately 1,664 students will participate.

DEVELOPING LEADERSHIP PERSONNEL FOR MODEL LANGUAGE ARTS PROGRAMS (PLANNING)
Mount Clemens, Macomb County Intermediate School District Project Number DPSC-67-3319

A pool of leadership personnel will be developed to conduct inservice teacher training in the improvement of language arts skills for underachievers in a metropolitan area. Resource specialists from local universities will be employed to familiarize selected school personnel from participating districts with: (1) exemplary language arts programs and research, (2) the use of such supplementary services and centers as Morel and Eric Clearinghouses, and (3) the development and implementation of language arts programs suitable to the needs of local schools. A program of inservice teacher training will be conducted at the local building level and will involve the total staff in better understanding of learner needs and an opportunity to become proficient in the use of instructional materials and methodology. The building principal will be involved from the outset of planning and given the necessary support. During the first year, planning will be developed for two groups: (1) language arts consultant trainees--30 teachers with one year previous experience in the program who will assume leadership in implementing programs at the local level, and (2) reading clinician trainees--20 selected classroom teachers beginning initial training. The following year the reading clinicians will pursue the training program for language arts consultants

and a second group of 20 trainees will be trained as reading clinicians. Approximately 53,592 students will be served.

EXEMPLARY SCHOOL (OPERATIONAL)
Pontiac, Waterford Township School District
Project Number DPSC-67-4056

School staff will be employed and trained to develop an individualized program for the opening of a new elementary school facility in a suburban community. The school principal and teaching staff will work together full-time for six weeks prior to the school year to initiate planning for the new school. Attitudes, understandings, methods, and materials will be developed to enable the staff to meet the individual needs of all students attending the school. Consideration will be given to nongrading, various groupings, student evaluation, team teaching, programmed instruction, and pupil team learning. Intensive student evaluation wil be made, including home visits to develop case histories. Individual student differences will be unmasked and dealt with in accordance with the readiness level of each child. Efforts will be made to deal with out-of-school problems that keep a child from learning. Effective home-school relationships will be developed. Community surveys will be conducted and resources evaluated. During the fall semester, students will be housed in an old building soon to be converted into offices. Through extensive use of substitute and student teachers, the staff will continue to work and study together until the opening of the new building at the start of the spring semester. At this point, the school will serve as a demonstration center for the observation of teaching practices and techniques resulting from the planning and study phases of the program. Approximately 350 elementary students will be served.

INGHAM COUNTY EDUCATIONAL EXCHANGE PROGRAM IN WORLD UNDERSTANDING AND COMPARATIVE CULTURES (OPERATIONAL)
Mason, Ingham Intermediate Board of Education Project Number DPSC-67-3741

A comprehensive program will be offered to teachers and high school students, both public and parochial, in the study of comparative cultures. Students will be selected from five high schools in the county. Emphasis will be placed on cognition of the non-Western world. The program will involve extensive use of the cultural resources of the metropolitan area and will utilize the facilities of the nearby state university. The students will be exposed to students of different backgrounds from high

N. Carl

schools other than their own, and they will have regular contacts with foreign students at the university. Instructional material will be selected from appropriate paperbacks, periodicals, and films, with special emphasis on the utilization of the collections of the state university. Also, films produced by various foreign governments will be obtained from the particular embassies. This program will be conducted by an interschool teaching team consisting of one full-time teacher and three half-time teachers and will be offered to 250 selected juniors and seniors. They will meet every afternoon during the regular school year for a flexible scheduled block time period.

HUMAN RELATIONS LABORATORY TRAINING--INNOVATION IN CURRICULUM (OPERATIONAL) Springport Public Schools Project Number DPSC-67-4229

A human relations laboratory will be established to teach high school students interactive skills and to help them understand their own behavior. Sensitivity training for students, utilizing small T-groups, will give individuals an opportunity to gain a more adequate perception of themselves in the group situation. Group dynamics should develop an understanding among students of the feelings of others in their peer group. In the supportive atmosphere of the small group, individuals will try new kinds of behaviors and test their effectiveness in interacting with others. The program should help the potential dropout who is locked into his inappropriate behavior through the rigid standards of his peer group. Skilled trainers for the laboratories will be selected from the ranks of the teaching staff. Approximately 334 public school students, grades 7-12, will participate.

EPIC EDUCATIONAL PLANNING TO IMPROVE THE COMMUNITY (OPERATIONAL)
Marshall, Calhoun Intermediate School District Project Number DPSC-67-3976

Project EPIC will be established to provide a systematic approach to educational change. A general planning council will establish a curriculum development committee, consisting of one representative from each school district to investigate possible instruments designed to determine the quality of education. A process center, consisting of an information center, IMPACT center, and identification center, will be established. The information center will direct the dissemination of significant research findings and provide information on community

resources. The IMPACT center will develop a readiness for change through sensitivity training, inservice demonstration, workshops, and mass media. The first phase of the project will consist of an eight-week sensitivity training course utilizing unstructured "T" groups for 400 school personnel. The identification center will be concerned with gathering data, assessing needs, and providing measuring instruments and technical assistance to aid the local schools in self-analysis. Approximately 138,858 public and nonpublic school students, grades K-12, preschool children and adults will be served.

INNOVATION AND DEMONSTRATION IN THE SOCIAL STUDIES, K-6 (OPERATIONAL) St. Joseph Public Schools Project Number DPSC-67-3619

An interdisciplinary approach to social studies will be offered to elementary school children in three geographically separate districts. Each district will represent a different socioeconomic structure. Control groups of students receiving traditional social studies instruction will be maintained in each school as the new materials are introduced in selected classes. studies teachers will receive instruction in the effective use of new materials and will be trained in induction, inquiry, and discovery. Teachers will also receive prepatory instruction in economics, anthropology, political science, and geography. Domonstration centers, containing a library, audiovisual materials, and supplementary texts, will be established in each of the cooperating schools. Approximately 29,000 public and nonpublic school students, grades K-6, will be served.

INSTRUCTIONAL SYSTEMS DESIGN FOR MAXIMIZATION
OF LEARNING THROUGH INSERVICE EDUCATION
(PLANNING)
Marquette, Marquette-Alger Intermediate School District
Project Number DPSC-67-2932

Teachers in an isolated rural area will receive inservice training in the use of new instructional materials and media. The existing instructional materials center will be expanded to make more materials available to teachers. Using a sociometric survey, an adivsory board will identify innovators and early adopters within all school systems. Teachers so identified will be designated as change agents and invited to seminar-workshop sessions at a nearby university. After training, the teachers will return to their home districts and conduct workshops in

the systematic use of instructional media. In addition, the change agents will serve in a planning capacity regarding additinoal facilities, materials, and training which can be provided to teachers. A long-range master plan for continued development of the acquisition of four mobile units will be considered to provide teachers with easy access to a complete supply of instructional materials. The units will each be staffed by a learning resources coordinator to assist teachers in proper selection of materials. Approximately 80,000 public and nonpublic school students, grades K-12 will be served.

IMPACT SEVEN-ADVANCEMENT OF EDUCATION IN LAKE MANISTEE, MASON, MACOSTA, OSCEOLA, WEXFORD, AND MISSAUKEE COUNTIES, MICHIGAN (OPERATIONAL)
Manistee Intermediate School District
Project Number DPSC-67-3896

Demonstration programs will be developed to introduce improvements in instructional skills and school curriculum and to serve as models for other schools in a predominantely rural seven-county area. These improvements will be accomplished through the use of workshops, demonstrations, visitations, conferences, consultant services, and printed materials which will develop revised teaching methods, techniques, school programs, and instructional In addition, and educational journal will be materials. disseminated emphasizing area history, industries, cultures, and arts, and will include teacher supplements to be used in teaching units. Teacher recruitment will be developed as well as inservice training to develop educational leaders and improve teaching skills. Orientation of substitute teachers will be provided to obtain released time for teachers to visit and work in innovative and exemplary education projects in other areas. Upon returning the teacher will assist in implementing new techniques as part of the program. Local community groups and ancillary school personnel will be oriented to the changes and how they will be affected by them. A research center will be established to provide area school with educational research data. Cultural enrichment and information on area industry will be provided to the students. Approximately 28,943 public and nonpublic school students, grades K-12 will be served.

PROJECT H.E.L.P. (OPERATIONAL) Lincoln Park City School District Project Number DPSC-67-3885

A planning-pilot program will be designed to help and advise potential dropouts to complete their high school education. The emphasis of the program will be to identify the potential dropout and to replace the present disciplinary technique with a quidance program aimed at the student's welfare. The key personnel in this project will be the classroom teacher and the school counselor. Project H.E.S.P. will utilize the following methods: (1) organization of a staff empathetic with and diversified for the needs of the potential dropout, (2) preparation and continual instruction of the staff to insure competence and cooperation in assisting students, (3) study of the problems and conditions affecting the potential dropouts, (4) study of methods needed to improve attitudes and achievement levels of these students, (5) involvement and education of the parents and the community, and (6) improvement of the competence of other classroom teachers. The preparation of project H.E.L.P. will begin with a summer seminar for the two weeks preceding the opening Continuing instruction to insure competence will be provided via regular Saturday morning staff meetings during the school year. Project H.E.L.P. will train 30 teachers so that they can in turn aid the potential dropouts. The project will cover one county with one school district. Approximately 300 students, grades 7-12 will benefit.

STRATEGY FOR PLANNED EDUCATIONAL CHANGE (SPEC) (OPERATIONAL)
Jackson Union School District
Project Number DPSC-67-4163

Educational change will be catalyzed within a school system and community to help maximize learning opportunities for all students in the district. Personal, interpersonal, and group processes will be studied to: (1) evolve a more thorough understanding of the process of change, and (2) develop problem-solving skills which, when applied, should result in desired educational change and continued self-renewal. Change agent teams, including students, professional school staff, paraprofessionals, and members of the community, will confront and find solutions to problems at four levels -- the individual, the structural, the administrative, and the environmental Trained personnel, capable of supporting or community. the change agent teams, will be developed with the school system. Sensitivity training in behavioral science, skill

practice, and role-playing will be conducted, using the laboratory method. A balance between interpersonal and action research skill development will be maintained. Training in the home setting will be included to reinforce the laboratory learning. Needed changes will be identified, solutions planned and tested, and their effectiveness evaluated. The teams will then return to the laboratory setting to conduct diagnostic planning. Approximately 126 secondary students, 315 professional staff, 63 administrators, 63 paraprofessionals, and 126 community members will participate over a three-year period.

DUAL OPPORTUNITY EDUCATIONAL SERVICES (DOES) (OPERATIONAL)
Jackson Union School District
Project Number DPSC-67-4096

Paraprofessionals will be introduced into a metropolitan school district to upgrade services for students, teachers, school and community. Duties of the paraprofessional will include: (1) providing students with more individual attention to increase teaching effectiveness and student learning processes, (2) providing teachers with instructional assistance and releasing them from such nonteaching functions as recordkeeping and clearical duties, playground and classroom supervision, materials preparation, audiovisual equipment operation, and library services, and (3) serving as a liaison to strengthen school communication with family and community units. Qualified people in the community will be recruited and trained to enhance skills in working with students, teachers, and parents. An inservice curriculum will be designed and presented to develop the paraprofessional's proficiency in those tasks to be assumed. Courses will be conducted in basic communications, basic mathematics, machine operations and audiovisual techniques, child development, resource centers, and elementary school procedure. Consultants from the school district and community college will provide help and quidance. The paraprofessionals will be introduced into 10 selected elementary classrooms during the first operational year. After evaluation, the program will be expanded to selected high school classrooms during the following year. Approximately 4,362 students in grades K-12 will be served.

COMMUNITY SCHOOL SERVICES--A DEMONSTRATION (OPERATIONAL)
Ionia County Intermediate School District
Project Number DPSC-67-4088

Varied cocurricular programs will be offered in a rural five-county area to develop the image of the school as the center of community living. Cooperative programs in adult education, out-of-school youth training, recreation, curriculum enrichment, and community participation will be instituted on an after-school, Saturday, and summer vacation basis. Courses to be offered will include: (1) enrichment programs in art, music, drama, science, mathematics, social studies; and language arts for students in grades K-12, (2) recreation and physical fitness programs, (3) enrichment/recreation activities for handicapped children, (4) tutoring programs for underachievers who do not have a place to study at home, (5) academic adult education classes leading to a high school degree, (6) vocational, job training, and retraining classes, (7) basic skills for adult illiterates, (8) parent education and parent-student counseling, (9) family night education and recreational programs, and (10) social clubs for senior citizens, special interest groups, and teenagers. Community-school planning councils will be formed to establish programs suited to the individual needs of each community. Approximately 9,450 persons will be served.

PROJECT BASIC, BOARDS AND ADMINISTRATORS STUDYING IMPLICATION OF CHANGE (OPERATIONAL) Howell, Livingston Intermediate School District Project Number DPSC-67-4016

The role of the Board of Education will be examined in a rapdily growing suburban/rural area. Emphasis will be placed on inservice education to prepare Board members to deal with current educational problems and trends and to strengthen their understanding of group processes and goal-Active participation of Board members setting behavior. and key lay persons in workshops and seminars formulated by skilled practitioners will become a continuing part of the school board scene. Monthly workshop sessions will be scheduled during the school year, during which roleplaying, lecture and group discussion techniques will be A typical workshop session will include orientation and lecture followed by small group sessions in which problem situations will be simulated and discussed. Topics to be treated by Project Basic will include: role of school administrators and school superintendents, (2) role of school board, (3) examination of bases which

70----

influence educational policy making, (4) impact of federal and state support on local financing and of federal and state legislation on local policy, (5) new approaches and techniques in instruction, (6) needs of the schools in relation to mental health, learning disabilities, and vocational education, and (7) needs for independent evaluation of programs. Approximately 12,269 public and non-public students, grades K-12 will be served.

MUSIC THERAPY PROGRAM FOR HANDICAPPED CHILDREN (OPERATIONAL) Hancock, Copper County Intermediate School District Project Number DPSC-67-4060

A program will be established to provide music activities for mentally, physically and emotionall handicapped children who are enrolled in special education classes. The purposes will be to provide enriching group participation therapy through songs, listening activites, instruments, rhythms, games, and dances and to create a stepping stone to successful experiences for children who have been accustomed to failure. Evaluations will be made of the social, emotional, and intellectual growth of handicapped children through the application of such activities. These musical activities should be an effective and useful tool for combining and teaching many nonacademic subjects and should contribute to the development of handicapped children in the following areas--physical development, mental health, social development, and language development. An additional music teacher will be employed, and the individual school districts will provide and maintain pianos and supplementary equipment. The children involved in the program will be housed in 15 classrooms throughout a three-county area. Approximately 200 children in grades 1-12 will participate.

REGIONAL ENRICHMENT CENTER (OPERATIONAL)
Kalamazoo Valley Intermediate School District
Project Number DPSC-67-4241

An instructional materials center with supplementary services will be established for a predominantly urban three-county area. Emphasis will be placed on development of a specialized film library and production services, cultural enrichment services, and inservice training. Daily delivery and retrieval of films will be provided each school district from the center via delivery vans. During the first year the film library will concentrate on procuring films in the area of language arts, to supplement Title I reading programs in area schools. During

following years other facets of the curriculum will be added. The production center will acquaint teachers with a wide variety of visual aids, stimulate increased use of media, provide instruction in its proper use, and produce visual aids for classroom use. Specialists will be employed to study area needs, develop long-range inservice programs, and compile a professional resources library. Cultural enrichment activities will include the development of a local cultural resources catalog and an exchange student directory. Community music and drama groups will be used and investigation will be made of using performing arts groups from local colleges. Approximately 70,000 students will be served.

DIVERSIFIED FOUNDATIONS CURRICULUM FOR AN URBAN SECONDARY SCHOOL (PLANNING) Highland Park City School District Project Number DPSC-67-4093

A high school program will be reorganized to meet the needs of a highly diversified student body in a changing urban community. Planning will be conducted over a period of two years with implementation during the third year. The school program will be reorganized into four major (1) a foundation school for all students, providing developmental communications, humanities, and social studies, (2) an instructional resources and assistance center serving all students, organizing and loaning library reference materials, audiovisual materials, programmed materials, and resources for individual and small group study, (3) an academic school to develop significant learning activities for students, and (4) an occupational school, providing students with vocational skills, attitudes, and knowledge. Each student will participate in either the academic or the occupations school, or some combination of both. Planning will include the development of designs for major reorganization, staff inservice training, evaluation and four test projects to include: (1) establishing and staffing a library-instructional materials complex, (2) conducting an honors school, (3) organizing a performing arts center using video equipment, and (4) developing an occupational workshop for low-Approximately 60 students will participate in each of the last three projects. Approximately 1,945 high school students will be served.

SYSTEMWIDE IMPLEMENTATION OF A PERCEPTUAL DEVELOPMENT/PHYSIOLOGICAL READINESS/ NONGRADED PROGRAM (OPERATIONAL) Madison Heights, Lamphere Public Schools Project Number DPSC-67-3473

Systemwide differential education will be implemented for grades K-12 and preschool in an urban district. Revisions will be instituted in curriculum, personnel utilization, and classroom and school organization. Perceptual development and physiological readiness programs, and nongraded organization levels will be introduced, based on thorough screening and diagnosis of learning difficulties. Children will be instructed on the basis of their physiological readiness for various types of learning. The learning program for each student will be devised to fit his developmental stage and to allow progress at his own pace. During the first year, kindergarten and first grade classes will be reorganized into nongraded primary units, with grades 2-3 and 4-6 restructured in following years. Concurrent with elementary structural revisions will be similar reorganization of grades 7-12. Pupil-teacher ratio will be reduced to 20-to-A wide range of instructional materials and audiovisual aids will be provided for multimedia multisensory instructional programs. Physical education teachers will implement a revised physical education curriculum to include gross motor movements designed to prepare the child for the refined motor skills necessary for academic school progress. Inservice teacher training and parent education programs will be conducted as part of the program. Approximately 7,963 students will be served.

COMMUNITY EDUCATION CENTER DEMONSTRATION PROJECT (OPERATIONAL) Flint Board of Education Project Number DPSC-67-3462

Community agencies and resources will participate in the planning of a community education center to meet the educational needs of the inner city. The combination of two now-separate elementary school attendance areas, one predominantly Negro and one predominantly Caucasian, will allow development of a broadbased community service system within a school, drawing out the resources of the area itself to serve area needs. During the first year parents and other adults from the two attendance areas will be involved in a self-assessment of the social, health, occupational, and education status of their neighborhood. With consultant help and the faculties of the two existing schools, the community itself will commence planning of a

new community service school designed to meet the identified needs. Educational specifications determined will be submitted for incorporation into the design of the new facility. During the second year dental and health services, vocational guidance, and social services will commence on a full, scale, based on needs determined by the community-teacher groups. When the new school structure is ready for occupancy in the third year, the programs will be transferred to the new facility. During this period the use of the new school facilities will be demonstrated to the remainder of the school community. Approximately 4,653 elementary students will be served.

I/D/E/A/ NATIONAL DEMONSTRATION SCHOOL PROJECT-MARINE CITY WARD-COTTRELL HIGH SCHOOL (OPERATIONAL)
St. Clair, East China Township School District 3
Project Number DPSC-67-4181

A high school will be used to demonstrate and test results of a national research effort by the Institute for Development of Educational Activities (IDEA). The Institute was created by a foundation to assist teachers, school administrators, and lay groups with plans for school The school is one of thirty six in the improvement. country selected by the Institute to be a demonstration The program will include a nongraded system, variations of instructional group size, new staffing patterns, flexible scheduling procedures, team teaching, and independent study. Objectives are to develop procedures for initiating research, to evaluate and disseminate promising practices, to inform interested schools of new programs, and to cooperate with other IDEA schools to increase the effectiveness of activities and profit from each other's experiences. Inservice training will be conducted to acquaint visiting educators with the program. Films, brochures, and other media will be used to disseminate information about the program to interested schools. Personnel will be supplied by the IDEA staff and its corps of consultants at no expense to Title III. Approximately 3,542,500 persons will be served.

ACTIVITIES TO SUPPORT AND STIMULATE INNOVATION IN SCHOOLS TODAY (ASSIST) (OPERATIONAL) Detroit, Wayne County Intermediate School District Project Number DPSC-67-4092

A regional service center will be established in a central city area. The center, called ASSIST will have three major components: (1) a clearinghouse, (2) staff development, and (3) action programs. The clearinghouse project will offer selected dissemination of information services, an educational action line providing telephone and over-the-counter information to participating educators, and an inventory of consultants and new educational practices. Staff development activities will be planned around a monthly theme based on one of the following five needs: (1) fostering positive self-concepts in students, (2) motivating students, (3) understanding and providing for individual student needs, (4) understanding thelearning processes, and (5) dealing with problem students. A repository of telephone tapes will be developed related to the theme under study. Three specialists will work on different developmental areas of each theme. Action programs of ongoing demonstrations and experimentations in local schools will be coordinated by the center, and test projects will be initiated. One project will be aimed at improving self-concept among low-achieving boys by having four male elementary teachers direct cocurricular activities involving skill and risk-taking. Approximately 360 students will participate in test projects.

OCCUPATIONAL EDUCATION FOR ALL STUDENTS (OPERATIONAL)
Niles Community Schools
Project Number DPSC-67-3746

Occupational education will be offered to collegebound and prevocational students in grades 6-10. Emphasis will be placed upon helping each student to develop: proper attitudes toward the world of work, (2) an appreciation of the tools of work, (3) a knowledge of the many families of work, and (4) an understanding of the free enterprise system. Occupational counselors will work with sixth grade students and their parents to assure that students are working toward realistic goals. In the seventh and eighth grades, students will have nine weeks of occupational courses in home economics, business, and industrial The units will be designed to help the students develop insight into how people get their work done. The students will have th eopportunity to work in many different phases of a specific occupational area. Ninth grade students, in addition to occupational arts units, will create

an awareness of clusters of occupations. During the final week, students will be required to develop a tentative schedule of goal-oriented courses for the next three grades. All tenth grade students will be required to enroll in a junior achievement program. Representatives from local business and industry will consult with the staff and students on their projects. Approximately 2,626 public and nonpublic school students, grades 6-10, will be served.

I/D/E/A/ NATIONAL DEMONSTRATION SCHOOL PROJECT (OPERATIONAL)
Troy City School District
Project Number DPSC-67-3589

P.

A high school will be used to demonstrate and test results of a national research effort by the Institute for Development of Educational Activities (IDEA). The Institute was created by a foundation to assist teachers. school administrators, and lay groups with plans for school improvement. The school is one of thirty six in the country selected by the Institute to be a demonstration school. The program will include a nongraded system, variations of instructional group size, continuous progress instruction, new staffing patterns, flexible scheduling procedures, team teaching, and independent study. Objectives are to develop procedures for initiating research, to evaluate and disseminate promising practices, to inform interested schools of new programs, and to cooperate with other IDEA schools to increase the effectiveness of activities and profit from each other's experiences. Inservice training will be provided in collaboration with IDEA. Seminars will be conducted to acquaint visiting educators with the Films, brochures, and other media will be used to disseminate information about the program to interested schools.

IMPROVING SELF-CONCEPT (OPERATIONAL)
Paw Paw Public Schools
Project Number DPSC-67-3584

Positive development of self-concept will be emphasized in a three-phase program to raise the expectations and achievement of potential dropouts and low-achievers from rural slums. A personalized and experience-centered curriculum will be developed and field tested on fifty four students from grades 5-12 with a master teacher for each eighteen students. During phase I, an eight-week summer program will be conducted for staff orientation, visits to similar projects, and analysis of student records. A four-week loosely structured student program will be

offered for diagnosis of individual needs and interests. Students and parents will be involved in self-improvement in relation to: (1) physical, mental, and emotional development, through physical fitness, grooming, health programs, and counseling, (2) family, through counseling and home-school involvement, (3) school, through academic, extracurricular, and outdoor activities, and (4) society, through cultural enrichment and citizen development activities. Phase II will involve a Fall camping experience for the students, accenting personal worth, cooperative living, recreation, conservation, and citizenship. During phase III the students will identify with their master teacher for the entire school year, in self-paced individual personalized programs providing successful and meaningful experiences. Evaluation will be made of individual student performance in relation to capabilities and desires.

PROPOSAL TO ESTABLISH FACILITIES FOR CONTINUOUS ASSESSMENT OF LEARNING POTENTIAL IN CONJUNCTION WITH CONTINUOUS PROVISION OF RELATED INSTRUCTIONAL AND SUPPLEMENTAL SERVICES (OPERATIONAL) Inkster Public Schools Project Number DPSC-67-3423

A child development center will be established in a centralized facility to provide enriched learning experiences and early diagnosis of individual learning potential for all kindergarten children in a city school district. Elementary students and teachers, grades 1-5 normally assigned to the facility will be reassigned to other school locations. Concurrently, planning will be conducted to extend the services of center and staff to encompass all grades, in a shift from six neighborhood schools to four community schools. Individualized instruction will be emphasized. An instructional materials center will be developed for all grades. Center staff will consist of an interdisciplinary team oriented to organic health problems, mental health, cognitive learning, instructional materials, oral communication, cultural patterns, and classroom teaching. Individual children will be studied in terms of learning patterns. Optimal instructional patterns will be developed and communicated to teachers in grades 1-3. Communication will be developed with parents of children with learning problems. training will be conducted, including involving teachers as working members of the team. Existing curricular procedures and materials will be examined for use with various cultural patterns, and more appropriate materials procured or locally prepared. Approximately 500 kindergarten children will participate.

PROJECT APEX-OPERATIONAL-APPROPRIATE PLACEMENT FOR EXCELLENCE IN ENGLISH (OPERATIONAL)
Trenton City Public Schools
Project Number DPSC-67-3121

A nongraded phase-elective model English course for secondary schools will be implemented in an urban high school. Appropriate placement of students for maximum growth will be initiated to increase responsibility, interest, achievement, and creativity in English students at the secondary level. A sequence of semester English classes will be offered, to be elected by students according to individual needs and interests. Courses of study will be taught by the teachers involved in planning the program. Freedom to learn will be coupled with student responsibility for learning. Teachers will be encouraged to incorporate such new instructional materials as paperback books, programmed learning kits, films and film strips, tape recorders, and other audiovisual media into their classes. Inductive teaching methods will be employed to develop independent thinking. New means of evaluating student progress, using a statistical design, will be set up by a consultant. Counselors and librarians will assist with APEX. Flexible student choice in major English areas should motivate the slow student and provide unlimited opportunities for the gifted to learn successfully. Approximately 1,800 secondary students will participate.

DEVELOPMENT OF POSITIVE SELF-CONCEPT (PLANNING)
Pontiac City School District
Project Number DPSC-67-3078

The development of positive attitudes about school and self through school-related activities will be explored for an urban district. School resources, cocurricular activities, community resources, and lay citizen groups will be mobilized in the development of a citizenshipcentered curriculum. Planning will indlude: (1) reviews of the literature, (2) random measurement of self-concept in district students, (3) inservice teacher conferences, (4) a four-week summer curriculum writing session, (5) field testing of self-concept development in one elementary school, and (6) evaluation. The academic achievement of students will be enhanced: (1) in reading through the use of polaroid camera scrapbooks showing positive student activities, (2) in oral language through student speaking at Toastmaster and Toastmistress clubs and, (3) in written language through a student newsletter. Citizenship will

be developed through walking trips to the civic center, neighborhood visits, student self-governing groups, and chartered plane flights to give perspective to local graphical-political relationships. Parental involvement and participation will be actively encouraged to increase positive attitudes in the home for reinforcing student attitude development. Ideas will be field tested to serve as models for expansion to other schools in the district. Approximately 600 elementary students will participate.

CURRICULUM DEVELOPMENT AND PROCEDURES STUDY FOR A COMMUNITY OF CHANGING CHARACTERISTICS (OPERATIONAL) Cheboygan Area School District Project Number DPSC-67-3882

A curriculum improvement program will be instituted in a school district where educational and economic levels are below statewide averages. The curriculum will be developed for use in a new high school under construction, a junior high which will be designed shortly, and existing junior high and elementary schools. The program will be initiated by a week-long teacher workshop with emphasis on sensitivity training and attitudinal change. groups will be formed to study the local school situation and make recommendations. The groups will consist of: (1) representatives of a regional educational laboratory, (2) local faculty (not administrative) members, and (3) representatives of each elementary and secondary level of the public schools, administrators, parochial schools, and community groups. Approximately 3,309 students, grades K-12, and preschoolers will be served.

DEVELOPMENT OF A CURRICULUM OF AN EXEMPLARY PROGRAM IN PHYSICAL EDUCATION, K-12 (OPERATIONAL)
Battle Creek City School District
Project Number DPSC-67-3788

An interdisciplinary approach to physical education will be instituted in a suburban area. The approach will combine valid and significant concepts representing the fundamentals of physical education with the common activities, needs, and developmental tasks of the learner. Emphasis will be placed on the composition of teaching-learning resource units for concrete and creative ways of translating curriculum into an operational program. The resource units/situational activities will be identified as: (1) growth in individual capacities, including health, physical qualities, motor performance, intellectual power, responsibility for moral choices, and aesthetic expression and

appreciation, (2) growth in social situations, including person-to-person relationship, group membership, and intergroup relationships, and (3) growth in ability to deal with environmental factors, including natural phenomena. Each resource unit will be directed toward specific behavioral objectives. The program will be introduced in three demonstration classes representing lower, middle, and mixed racial schools. Approximately 12,515 public and nonpublic school students will be served.

OPERATIONAL PROPOSAL TO DEVELOP THREE PROTOTYPE DEMONSTRATION CENTERS AND ASSOCIATE STAFF (OPERATIONAL) Ann Arbor Board of Education Project Number DPSC-67-4431

Demonstration curriculum centers will be established for three areas of language instruction and staff training will be initiated to develop curriculum specialists to serve an urban area. A bilingual resources center will be established to study problems of teaching children whose mother tongue is Spanish. A developed Spanish/English program will serve as a model for other bilingual instructional programs such as Polish/English. A second center, Humanities in French, will apply an area studies and team teaching approach to a sociocultural curriculum The third center, a learning laboratory, will include an instructional facility with instrumented individual study carrels and materials for art, music, social studies, and language enrichment, organized for independent study courses. The emphasis of staff training will be on team approach to curriculum and instructional leaders, content specialists, and other specialists will continually study and evaluate innovations in foreign language instruction at the local level. The demonstration centers will serve as training sites for teachers. At the end of formal training course, each trainee will be placed in a school to function independently as an innovative agent in language curriculum and instructional development. Approximately 3,599 public and nonpublic school students, grades 1-12, will be served.

DOWNRIVER LEARNING DISABILITY CORRECTION CENTER (OPERATIONAL)
Wyandotte City School District
Project Number DPSC-68-5295

A learning disabilities correction center will be established in a metropolitan area. A four-pronged program will be planned: (1) inservice minicourses for 500 teachers, (2) experimental activities in the referral-diagnosis-prescription-treatment cycle for 200 handicapped

children and their classroom teachers, (3) a project newsletter, and (4) an inquiry workshop for selected teachers. The minicourses will provide teachers with structured opportunities to become more familiar with existing knowledge of learning disabilities and to sharpen their skills in identifying and referring handicapped children. dents referred to the center for diagnosis will be accompanied by their classroom teacher. Through the use of one-way glass, teachers will be able to view the student as he is tested. Following the administration of the battery, the examiner and the teacher will discuss the diagnosis in detail. Teachers will be given a prescription package of suggested group-teaching techniques that should be beneficial to handicapped students. Center staff members will maintain liaison with classroom teachers of referred children and will also observe in classrooms, do demonstration teaching, and work with handicapped students individually. Periodic parent conferences will be planned. A five-week inquiry workshop will provide selected classroom teachers with additional opportunities to explore the nature of learning disabilities and the methods of helping children overcome these disabilities. Approximately 900 students, grades K-12 will be served.

PROGRAM TO MODIFY CONCEPTS HELD BY LOW-ACHIEVING STUDENTS (OPERATIONAL) Traverse City Public Schools Project Number DPSC-68-5439

Potential dropouts will be offered a program of conservation education and vocational development. underdeveloped site will be acquired, and all construction, machinery operation, and site improvement/repain will be carried out by the boys under qualified supervision. dents will spend one-half of the school day in their home high school and will then be bussed to the site for outdoor education experiences and special classes. onsite classroom, shop buildings, and greenhouses will provide opportunities in carpentry, masonry, electricity, The boys will also operate tractors, trucks, and plumbing. snow removal equipment, and a lumber mill to gain experience in machinery operation. The program will be designed to offer successful experiences to students accustomed to scholastic failure, and the curriculum will be highly Bruner's discovery method of learning will individualized. be stressed. Consultants in the areas of fish, wildlife, biology, agriculture, and tree management will assist the boys in projects dealing with lumber operations, stream improvement, outdoor camping, and land capability. onsite classroom will contain pertinent vocational materials. The program should develop improved work habits

and attitudes among low-achieving high school boys. Approximately forty-five students, grades 11 and 12, will participate initially.

PUPIL PERSONNEL SPECIAL SERVICES CENTER (OPERATIONAL)
Lansing School District
Project Number DPSC-68-5713

248

A student personnel special services center will be established in an urban area to facilitate articulation and interaction among all community service agencies and specialized personnel. Case conferences and a team approach will be instituted. School counselors will act as screening agents, and they will determine whether the referral is appropriate and whether it is being made to the correct service. All team members will make themselves available to classroom teachers to provide consultation and A permanent substitute teacher will be engaged direction. to provide released time for teacher-team conferences. master file will be maintained on each student to facilitate interaction and to prevent duplication of information and effort. Through PTA meetings and in some instances, through case conferences, team members will keep parents informed of the school services being provided by the Individual and group counseling will be offered to students. Group testing will be provided, and each counselor will be responsible for the administration of group tests in each school. Center personnel will provide psychological or physical examinations where neces-The team leader will schedule conferences in which all necessary personnel, including consultants from special education, will be brought together to discuss the classification and placement of students. Team members will work with families of school children to determine causes of behavior and to treat symptoms. Approximately 3,128 students, grades K-12 will be served.

PROJECT TO IDENTIFY AND DISSEMINATE OUTSTANDING MICHIGAN TITLE III PROGRAMS (OPERATIONAL)
Detroit, Wayne County Intermediate School District
Project Number DPSC-68-5561

A statewide dissemination center will be established, and task force groups will be formed to develop criteria for Title III program evaluation. Effective dissemination techniques will be identified and utilized to provide information about superior programs on a statewide basis. The State Department of Education, Bureau of Educational Services staff will assume major responsibility for the coordination and direction of the evaluative

Appropriate representatives of the Department of process. Education and key state educational organizations will meet periodically to ascertain how existing groups with evaluation know-how can contribute to the development of criteria and the selection of Title III programs to be dis-Additional task force groups will suggest other seminated. means required to effectively disseminate educational information, such as the identification of target groups, scheduling of presentations, loan of materials, and feedback procedures to assess the impact of dissemination. Title III center in the state's major urban complex will be augmented to include preparation and production activities for the statewide project. A series of printed and nonprinted materials will be prepared for dissemination by the center staff. The feasibility of teaching fairs, patterned after the science fairs for students, will be considered. Approximately 2,322,131 students, grades K-12, will be served.

DETROIT ACADEMIC ACHIEVEMENT PROGRAM (OPERATIONAL)
Detroit Board of Education
Project Number DPSC-68-5434

A full range of educational activities will be offered to inner-city elementary students. Emphasis will be placed upon developing proficiency in language and computational skills among culturally deprived under-achievers. A three-pronged program will be planned: (1) reduction of class size to a maximum of twenty-two students per class to facilitate greater student-teacher interaction, (2) establishment of a cluster of four teachers for every three classes, to provide a cluster of four teachers for smallgroup and individual instruction, and (3) provision of four assistant principals per school to serve as curricular leaders and supervisors for different grade levels. Diagnostic teaching will be stressed. In addition, all schools will be encouraged to borrow ideas and techniques from test projects currently in progress in the city's schools. These projects will include: (1) great cities school improvement program, including the services of a schoolcommunity agent and a reading consultant, and provisions for open schools during evenings, weekends, and summers, (2) inschool youth work-training project, (3) inservice teacher training, (4) urban area employment project to provide employment as school aides for members of lowincome families, Bank Street proposal to produce maximum utilization of teacher aides, (6) National Teacher Corps to increase the number of teachers trained in urban methodology, (7) Urban Adult Education Institute, and (8) preschool education for 3- and 4-year-old children in both full-year and summer sessions. Approximately 6,372 students, grades K-6, and adults will be served.

READING EMPHASIS PROGRAM FOR UNDERACHIEVERS (OPERATIONAL) Inkster Public Schools
Project Number DPSC-68-5673

A reading-emphasis curriculum will be developed for underachieving third-grade students in a disadvantaged urban area. Emphasis will be placed upon relating remedial reading experience to the overall needs of the students. An informal classroom will be established to accommodate a maximum of twenty students. The classroom will contain study carrels, adequate space for small-group study, and a science table. Students will be given an opportunity to learn at their own rate of speed and to create, explore, and experiment with a given idea to develop their decisionmaking capabilities. Success experiences will be emphasized. Health screenings will be given to every participating student, and a dentist will examine and correct dental problems. Parent-teacher interaction will be stressed. Discussion groups will be instituted by the school to examine parent attitudes, misconceptions, and misunderstandings, and to show parents how they may contribute to the success of the program. Parents will also be requested to serve as paid teachers' aides in the classroom, on a rotating basis. Home visitation programs will also be instituted to foster greater home/school continuity. Approximately twenty third-grade students will be served.

VEHICLE FOR CHANGE (OPERATIONAL)
Traverse City, Traverse Bay Intermediate District
Project Number DPSC-68-5353

An occupational training program in data processing will be established in a five-county rural area to coordinate a program of instruction through which experimentation of new educational methods can be accomplished. The occupational training program in data processing will be the central vehicle for change and will be used to maximize the influence of new methods on the four components of the educational system--students, teachers, administrators, and community. Seven specialized projects will be integrally connected as component parts of the occupational These specialized projects will be: training program. (1) providing leadership and structure for a vehicle for change, (2) establishing a new occupational training program in data processing, (3) facilitating the 15-year leap into the age of cybernation, (4) maximizing the effectiveness of area teachers, (5) developing a professional staff, (6) facilitating curriculum development and enrichment, and (7) establishing the TBA educational data processing center. Featured as part of the program will be--inservice

teacher training, curriculum enrichment, team teaching, continuous progress units, data processing services, individual study, resource pooling, and information pooling. The pooling of resources and information among the participating counties will facilitate 20,000 students. Grades K-12 will be served.

PROJECT ON STUDENT VALUES (OPERATIONAL) Grand Rapids, Northview Public Schools Project Number DPSC-68-5432

Instructional units in value education will be introduced to students in a suburban/rural area. will be placed upon: (1) acquainting teachers with the psychological and sociological dynamics of value development and value assessment, and (2) acquainting students with the role of values in behavior and decision making. Forty teachers will be selected to participate in the demonstration of specially developed units of instruction in value education. Teachers will be offered: (1) inservice training experiences, such as workshop sessions, individual consultation, and observation, and (2) consultant assistance in the areas of curriculum innovation, methods development, evaluation techniques, and reporting. Guideline papers will be prepared which deal with various topics related to the value concept. Students will be tested for their value orientations. Reports and materials resulting from the project will be distributed to an extensive number of educational agencies. One-day institutes on value education will be provided at various school systems. Approximately 4,446 students, grades K-12, will be served.

IMPLEMENTING THE CHANGE PROCESS FOR INSTRUCTIONAL IMPROVEMENT (OPERATIONAL)
Livonia Public Schools
Project Number DPSC-68-5571

A change process for instructional improvement will be implemented in an urban area. It will be designed to achieve greater individualization of instruction through curriculum reorganization and the flexible use of time, materials, and facilities. Special features of the program will include: (1) providing each student with appropriate opportunities to follow a school program which meets his specific requirements with respect to scope, sequence, and progress rate, (2) developing in each student increased responsibility, characterized by the abilities to plan his own work, to profit from independent study opportunities, and to use effectively a variety of instructional materials,

and (3) developing and maintaining a school atmosphere which fosters constructive interaction among students and between students and their teachers. Inservice education activities for the faculty and staff of each participating senior high school will be encouraged. These activities will include—workshops, meetings, visitations, and independent study. These activities will be focused directly on the instructional task and the decision—making process with regard to curriculum change. Approximately 8,300 students, grades 9-12 will be served.

OAKLAND COUNTY MATHEMATICS PROJECT (OPERATIONAL) Pontiac, Oakland County Schools Project Number DPSC-68-5635

A four-year sequence of mathematics instruction will be offered to noncollege-preparatory students in a metropolitan area. Emphasis will be placed upon: (1) developing job-oriented instructional materials and methods for teaching terminal and low-achieving students, and (2) assisting teachers in understanding the special mathematical needs of noncollege-preparatory youth. Writing teams of specialists will be engaged to prepare the new mathematics curriculum. Team members will be acquainted with existing materials developed elsewhere, such as Camp, Lamp, and the Greater Cleveland Mathematics Program. Newly developed materials will be field-tested in twenty classes and will be evaluated in terms of teachability, readability, and effects on student achievement and attitude. Inservice sessions will be held for teachers of noncollege-preparatory youth. The sessions will feature materials, teaching aids, and applications that should be useful in teaching terminal students. Feedback from participating teachers will be used in the evaluation and revision of the instructional materials. The four-year mathematical sequence will emphasize the development of critical thinking, in contrast to the drill work used in traditional courses. The program will also include laboratory work, academic games and simulations, and open-ended activities. Approximately 31,872 students, grades 9-12, will be served.

YPSILANTI PRESCHOOL CURRICULUM DEMONSTRATION PROJECT (OPERATIONAL)
Ypsilanti School District
Project Number DPSC-68-5636

Four preschool curriculums, designed to ameliorate the educational deficiencies of disadvantaged and functionally retarded preschool children, will be tested in a metropolitan area. The project will have four components:

 aiding disadvantaged preschoolers in sociopsychological development, (2) educating mothers to support the cognitive development of their children, (3) assessing and documenting the four curriculum styles to be used, and (4) disseminating information gained from the project. The four curriculum styles will be: (1) the Perry Preschool Curriculum, (2) the Language Training Curriculum, (3) the Traditional Nursery Curriculum, and (4) the Naturalistic Nursery Curriculum. The Perry Preschool Curriculum, organized around cognitive goals based primarily upon Piaget's cognitive development theory, will utilize teaching techniques such as -- verbal bombardment, dramatic play, and various language training methods. The Language Training Curriculum, which is a task-oriented curriculum, will employ many techniques of foreign language training pro-It will include arithemtic and reading as part of the curriculum. The Traditional Nursery School Curriculum will emphasize unit teaching about general concepts, close attention to the individual emotional and social needs of each child, and a considerable degree of The Naturalistic Nursery School Curriculum permissiveness. will follow a John Dewey approach by involving the children directly in each experience. Approximately 64 preschoolers and 125 adults will participate.

PLANNING AND PILOT ACTIVITIES FOR DEVELOPMENT OF EDUCATIONAL PARK (PLANNING) Grand Rapids, Board of Education Project Number DPSC-68-5101

An educational park will be planned for an urban Emphasis will be placed upon: (1) offering an expanded curriculum to a thoroughly heterogeneous group of students, (2) involving both religious and civic groups in educational planning and instruction, and (3) providing opportunities for youth to participate in the activities of the cultural agencies located within the park. program will be initiated, in which eighty 11th and 12th grade students will be selected from each of the nine high schools. A complete cross-section of racial, religious, and socioeconomic groups will be represented. Students will be brought to the center to take specialized courses not available at the home school. At the center students will be grouped according to interest, need, and ability. Preoccupational and academic courses will be offered in such areas as prelaw, tool and die, data processing, television repair, advanced languages, debate and international relations. The facilities of the center will also be available for adult basic education during the day and in the evening, and dropouts will be encouraged to attend the center to receive specialized curricular

offerings not available when they attended school. All students will be provided with more individualized instruction, lower student-teacher ratio, improved instruction in various subject areas, and greater use of consultant help. The education park concept will be patterned after the Random Falls idea and the Great High Schools concept. Approximately 1,230 students, grades 11 and 12, will participate in the test project.

PROJECT REBUILD--SCHOOL FOR TOMORROW (OPERATIONAL)
Dearborn Public Schools
Project Number DPSC-68-5396

A vertical elementary school curriculum, stressing diagnostic teaching, will be introduced in a metropolitan area. New learning designs will be created which will enable the students to move toward conceptualizing, intellectualizing, and reorganizing of experiences into interrelated systems of knowledge. Six test studies will be conducted. A preschool diagnostic program will be established to identify readiness gaps among preschool children before they face the developmental tasks of kindergarten. Specialists will diagnose the child's physical, emotional, intellectual, social, perceptual, and conceptual developmental levels. Parents will be encouraged to work as aides in the preschool center. transitional, growing-up class will be established between kindergarten and first grade for immature or perceptually handicapped children who did not benefit from normal readiness programs in kindergarten. An individualized, multisensory approach to the teaching of basic skills will be The elementary school library will be redesigned as a learning laboratory to contain a wide variety of audiovisual materials. Schoolwide flexible scheduling will be implemented to make the library available for individual, small group, and class use. Tapes will be used in a new, individualized learning program for language arts. Videotapes will be used to enrich the science program. Community involvement in the new curriculum will be stressed, and a blue-ribbon laymen's committee will be formed to aid in school planning. Approximately 15,46 students, grades K-6 and preschool, will be served.

OUTDOOR EDUCATION LABORATORY (OPERATIONAL)
Constantine Public Schools
Project No. DPSC-68-5569

An outdoor education laboratory will be established on an existing school site in a rural district. Certain areas of the school site will be developed to provide

features which are desired as part of the study program: (1) a school forest, (2) soil study plots, and (3) a pond. Project staff will attempt to teach students the fundamental principles of conservation and to instill in them a sense of civic responsibility toward the land and its resources. A special inservice training program for teachers will be adopted to help them utilize the outdoor area to its fullest capacity also. The inservice program will consist of several afternoon or Saturday morning sessions. The services of resource people from various state and federal conservation agencies will be utilized. All areas of the school curriculum in grades K-12 will be involved in the development and utilization of the area so as to establish outdoor education as an integral part of the whole curriculum, rather than as an isolated unit of study. Art students will illustrate various features of the outdoor area or will create posters to serve as visual aids for the elementary orientation program. Shop classes will participate by making signs, markers, live traps, den boxes and/or birdhouses. Social studies, math, and English classes will also utilize the outdoor facility. Approximately 1,466 students, grades K-12 will be served.

DEMONSTRATION PRETECHNICAL PROGRAM (OPERATIONAL) Bridgeport Community School District Project Number DPSC-68-7538

A pretechnology curriculum will be designed for average-ability students in a suburban/rural area. Emphasis will be placed upon preparing mid-able students for a two-year vocationally oriented college program. technically oriented curriculum will include English, algebra, physics, and industrial arts/technical laboratory. Vocational counseling will be provided to junior high school students to build student awareness and create a desirable image for technical education. ing services will be continued throughout the technical curriculum. Consultants will be engaged to participate, with the program instructional staff, in a 10-week curriculum writing session, observing the following sequence: (1) devising pretechnical curriculum patterns for grades 10-12, (2) developing new instructional materials, (3) determining necessary audiovisual services, and (4) deciding upon types of equipment for the technical labora-The feasibility of a separate facility for pretories. technical students will be considered. A situation room will be established for inservice training activities, program planning sessions, and visitors' orientation and briefing. Visitations will be conducted to operating programs in California and Florida, and a regional

conference on technical education will be planned. Continuous liaison will be maintained with community college personnel, with representatives of business and industry, and with the state vocational education division. In addition, a model will be developed for community information and involvement. Approximately 1,900 students, grades 7-12, will be served.

BIRMINGHAM SOCIAL STUDIES CURRICULUM PROJECT Birming City School District Birmingham, Michigan Project Number DPSC-68-5323

A flexible social studies curriculum will be developed for students in a rapidly growing suburban area. Emphasis will be placed upon assessing the impact of the curriculum on student behavior. The following dimensions will be included in the new curriculum design: (1) a concept-centered K-12 structure featuring multimedia instruction, (2) a unit sequence presenting relevant samples of content, (3) learning experiences based on differences in cognitive styles and on differences in student responses to media, and (4) a variety of teaching strategies emphasizing flexibility of techniques. A systemwide network of interorganizational communication and articulation among staff, students, and parents will be developed. A process will be devised for continual use of feedback and data from evaluation in an ongoing curriculum revision. The substantive factors in the K-12 design will be assessed to insure interlocking of both content and process through evaluation of the impact on students. The horizontal impact of the social studies curriculum of other subject matter areas will also be studied. A new student evaluator form will be designed for teacher use in maintaining cumulative records of student progress. A log system will also be developed for teachers so that they may monitor the day-to-day implementation of the new curricu-Instruments will be designed to measure behavioral objectives longitudinally.

APPENDIX B

STUDENT ENROLLMENT BY INTERMEDIATE DISTRICTS

IN THE STATE OF MICHIGAN

APPENDIX B

STUDENT ENROLLMENT BY INTERMEDIATE DISTRICTS

IN THE STATE OF MICHIGAN

Intermediate District	Student Enrollment	
Allegan	18,045	
Alpena-Montmorency-Alcona	11,544	
Barry	8,328	
Bay-Arenac	30,311	
Berrien	45,340	
Branch	8,097	
Calhoun	35 , 574	
Lewis Cass	9,603	
Charlevoix-Emmet	10,473	
Cheboygan-Otsego-Presque Isle	10,716	
Clare	5,036	
Clinton	11,335	
COOR (Crawford-Oscoda-Ogemaw-		
Roscommon)	8,225	
Copper Country (Baraga,		
Houghton, Keewenau)	9,165	
Delta-Schoolcraft	11,517	
Dickinson-Iron	9,358	
Eastern Upper Peninsula		
(Chippewa-Luce-Mackinaw)	13,140	
Eaton	18,191	
Genesee	124,874	
Gladwin	3,395	
Gogebic-Ontonagon	7,812	
Gratiot-Isabella	18,814	
Hillsdale	9,278	
Huron	8,826	
Ingham	63,993	
Ionia	14,117	
Iosco	8,477	

Intermediate District	Student Enrollment
Jackson	35,345
Kalamazoo Valley	44,332
Kent	94,797
Lake	971
Lapeer	12,657
Lenawee	22,182
Livingston	14,839
Macomb	175,547
Manistee	4,591
Marquette-Alger	18,398
Mason	6,134
Mecosta-Osceola	11,449
Menominee	5,777
Midland	18,593
Monroe	30,186
Montcalm	13,637
Muskegon Area	43,568
Newaygo Oakland	8,312
	238,096
Oceana Ottawa Area	4,528 29,714
Saginaw	56,206
St. Clair	29,520
St. Joseph	13,695
Sanilac	10,314
Shiawassee	18,661
Traverse Bay (Grand Traverse,	10,001
Benzie, Kalkaska, Leelanau,	
Antrim)	18,656
Tuscola	15,021
Van Buren	17,712
Washtenaw	47,583
Wayne	576,956
Wexford-Missaukee	7,286