

**Core Curriculum
Development**

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**Problems and
Practices**

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Foreword

"TO PROVIDE all youth a common body of experience, organized around personal and social problems"; "to give boys and girls successful experiences in solving the problems which are real to them here and now, thus preparing them to solve future problems"; "to give youth experiences which will lead them to become better citizens in a democracy"; "to increase the holding power of the secondary school by providing a program that has meaning for all"—these are some of the reasons for a core curriculum.

Although these purposes are not served exclusively by a core program, such a program serves these purposes uniquely well. The organizational structure of core, which gives to one teacher the same group of pupils for two or more periods daily, presumably places the teacher in an effective position for discovering the immediate concerns of individuals and groups, for sensing real problems, and for providing the kind of help that is needed. Also, the longer period allows for continuity of interest, for greater relationship between subjects, and for a variety of types of experiences not possible in the usual 45-minute period.

Inevitably the core curriculum has met some opposition. Its purposes are not always made clear. There is sometimes a mistaken tendency to look upon it as an end rather than a means. If its purposes are understood, there may be doubt that it can accomplish those purposes. Problems beset it all along the way. Quite often the program in a

school does not develop beyond the modification of the organizational structure of the curriculum; at other times it will progress until significant changes in content and method have been achieved.

Insofar as it is concerned with the status of the core curriculum this bulletin supplements Office of Education Bulletin 1950, No. 5. Its purposes, however, are twofold: (1) To describe more fully the nature of the programs which have the organizational structure of core; and (2) to point to the problems which perplex administrators wishing to initiate or to extend the development of the core curriculum, and through illustrations of practice in schools which are moving forward with the program, to suggest ways of overcoming these problems.

Written primarily to be of help to high-school principals and teachers, this bulletin also has possibilities for use with laymen who are interested in finding out about core. Through its generous documentation of the literature covering programs in operation, it should prove helpful to research workers.

Appreciation is extended to the many high-school principals and teachers who supplied much of the information contained in this publication. Cooperation of school personnel in filling in the questionnaire, in supplementing it with additional material, and in so generously giving of their time is gratefully acknowledged.

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Introduction

Purpose and scope of the study

This bulletin brings together from several sources information on the *what* and the *how* of core curriculum practice. Many articles and brochures are in print describing aspects of the core in individual schools and school systems. Information about characteristics of the core curriculum is readily available in the literature. No comprehensive study has been made, however, to discover to what extent several of the commonly discussed characteristics actually are found in practice. Accordingly it was thought that the Office of Education could make a contribution through presenting the results of a survey of practice, with illustrations of how it is done gathered from widely scattered schools. In general, then, this bulletin attempts to answer two questions.

What is the core program like as it is being developed in the secondary schools of the United States?—A study of status by the Office of Education in 1949 reported on 545 public high schools of an estimated 833 which a Nation-wide sampling survey revealed were using core-type programs.¹ The questionnaire used asked for information about subjects included, time allotted, grades in which utilized, and number of pupils enrolled. Gathering of data revealing administrative and classroom practices was left for a future report. Accordingly, after the completion of the 1949 study, another questionnaire was prepared to obtain information about the nature of the core curriculum and the extent to which certain features, generally recognized as being characteristics of core programs, are actually found in practice.

How have high schools which have achieved fairly successful core programs attacked the problems which principals report as major concerns?—Illustrations of practice obtained during visits to selected schools, through correspondence, or from the literature are provided. These illustrations cover teacher preparation and in-service education, scheduling to provide conference periods, materials and equipment in the classroom, provision of resource units, introducing teacher-pupil planning in the core class, establishing sound public and staff relationships, and evaluating the outcomes of core.

¹ Wright, Grace S. *Core Curriculum in Public High Schools*, Washington, U. S. Government Printing Office, 1950. (Federal Security Agency, Office of Education, Bulletin 1950, No. 5)

Coverage by questionnaire

The second questionnaire was sent to all of the 545 schools and to other schools whose programs came to the writer's attention following the 1949 study. No systematic attempt was made, however, to locate such additional schools. First sendings of the questionnaire were in October 1950, with a followup in December to schools which had not replied. Altogether, replies were received from 593 schools. Of the original 545 schools, 398 returned the questionnaire with data filled in; 74 replied that they have no core program; and 73 failed to reply. One hundred and twenty-one usable replies were received from schools not a part of the earlier study. In all, 519 schools sent in replies which are included in the present study.

This questionnaire asked for information about the "core program in your school," and did not define the term. As is pointed out later, it would seem that many principals having unified studies or correlated courses—core-type but not true core—either failed to reply to the request or reported they do not have a core program. For this reason, and because, as stated above, no systematic attempt was made to locate additional schools using core-type programs, 519 is not significant as a total count of schools.

Visits to selected schools

The questionnaire gathered information about characteristics and problems which administrators report as major concerns. In order to discover how these problems are being met, schools in certain geographic areas which seemed from information available to have true core programs (those reported as Types C or D in the succeeding section on *Types*) were selected for visiting. Visits were made to a total of 24 schools in 13 cities in the States of Illinois, Kansas, Maryland, Michigan, Missouri, New York, Ohio, Oklahoma, and Pennsylvania. Core classes were observed and practices which seemed outstanding in certain respects were noted. Teachers, principals, and other staff members were interviewed. Conferences were held with officials in three State departments of education and in seven city school systems. Schools and places which were visited, and which are used for illustrative purposes in this study, are starred in the index at the back of this publication.

Other sources of information

Much additional information was obtained both through correspondence and from published materials. Recent literature in the field was canvassed and insofar as it relates to actual practices, this

has been drawn upon rather heavily. Besides the criterion of recency, other considerations for inclusion of references to a particular document were: (1) Its applicability to a practice or problem discussed in the present study for which similar illustrative material was not available from sources interviewed; (2) its use in supplementing what the writer learned from her visit to a school or city, thus providing the reader with a source of additional information about a particular program; and (3) its usefulness in pointing to activities in States or cities not otherwise reported upon.

Plan of this bulletin

The bulletin consists of two parts: Part I, a report of status and practice as revealed by the questionnaire, by visits, through a survey of the literature, and through correspondence, covers the extent of the use of different types of programs—those which are true core and those which are variations or core-type in nature. It considers the extent to which certain characteristics, such as heterogeneous grouping, extraclass activities, homeroom and guidance, and use of a single mark for "core," are found in practice. It deals with other matters of status, such as geographic areas of development, grades in which it is found, and total or partial enrollment of pupils within a given grade. And, finally, it describes core class procedures in several actual situations. Part II first enumerates the problems which high-school principals reported on the questionnaire as being the chief roadblocks in the operation or further enrichment of their core programs, then gives information about the extent of those problems for which the questionnaire gathered data, and, finally, attempts to show how some forward-looking high schools are tackling the major problems.

Limitations of the study

There are three principal limitations of this study: (1) Since a complete survey of all schools was not made, the representativeness of the findings of the questionnaire for the country as a whole may be subject to question. (2) Cities selected for visiting were chosen not only because of the work they are doing in core, but because of their central geographic location. For this reason there are no first-hand reports of programs in the South or in any State farther west than Oklahoma. (3) While there is fairly comprehensive reference to the most recent literature on core programs in operation, the treatment is not exhaustive due to limitations of space.

PART I

PART I STATUS AND PRACTICE

Types of Programs Classified as Core

LIKE MANY TERMS used in education, "core curriculum" has no precise definition. Basically it refers to a course in the common learnings which is designed to provide learning experiences needed by all youth. In this sense it borrows from the original use of the term when the required or basic subjects in a school's program were referred to as core subjects.

In addition to the "needed by all" concept, the core is generally recognized as having a distinct pattern of organization. The time given to it is longer than that given to a single subject. A core class usually meets for a double period; in some instances three or four periods are included in the "block" for which it is scheduled. The core is not an added course. It replaces two or more subjects in different major areas of the curriculum. Usually these are English and social studies. Nearly always one teacher teaches the core class.

Development in the Eight-Year Study

The core curriculum as such came into being during the Eight-Year Study² when participating schools were trying to find ways better to serve the needs of all youth. One method frequently used was to break down barriers between subjects. This was not new in education; elementary schools through the activity program had used it for a number of years. In secondary schools it had not been uncommon to find a fusion of two or more subjects within a broad field, such as the fusions which resulted in general science and general mathematics. Cutting across two or more broad fields such as English and social studies was a relatively new venture for the high school, however.

In the early years of the Eight-Year Study, breaking down subject barriers consisted simply of the correlation of two subjects: English with the chronological organization of history and mathematics with science. A later development was the use of a central theme for the

² *Allen, Wilford M. The Story of the Eight-Year Study. New York, Harper & Bros., 1922.*

unification of the subject-matter areas included. A problem approach, or finding out the what, why, and how, was used.

Some schools went still further in eliminating subject-matter lines. They believed that the school should do something about the problems which are persistent in the lives of adolescents as members of a democratic society. These problems are common to all youth and draw upon many different subjects for their solution. Working on them, it was thought, would develop the personal and social competence of youth. Also, the democratic processes of pupil-teacher planning and cooperative group work which would be used, should develop the habit of reflective thinking and skill in solving problems. Classes were organized on a block-of-time basis with one teacher in charge throughout the two or more periods.

Such classes, of course, had to replace subjects that were already in the curriculum, subjects that were required of all. English and social studies were the subjects usually chosen, with science, mathematics, art, music, or health added in some instances. These were basic or core subjects. The new program then became known as the "core curriculum" or sometimes as "general education." It had a distinct type of organization in the total school program; its content and method differed widely from traditional courses.

Varying Terminology and Characteristics

In the years since the Eight-Year Study considerable interest has been aroused in experimenting with the core pattern of organization. Some schools have also adopted core-type content and methods, others have traditionally subject-centered programs. These latter may simply correlate English and social studies as was practiced in the early years of the Eight-Year Study, each subject retaining its identity, or they may use a central theme for the unification of the subject matter they have always taught; either way, scope and sequence are largely determined by prescribed textbooks. Schoolmen use various terminology in referring to these core-type courses: general education, common learnings, unified studies, social living, basic studies, and frequently "core."

Most curriculum writers insist on an interpretation of core which involves a radical departure from subject-centered content and thus a departure from the study-recite method of teaching. Spears³ says, for example, that the core course originates from a basic citizenship objective and draws upon the subject areas replaced "for whatever they may offer in serving the general development of the students, in

³ Spears, Harold. *The High School for Today*. New York, American Book Co., 1930. p. 103.

keeping with the goals of the course." Caswell's⁴ proposal for the core is the development of a "continuous, carefully planned series of experiences which are based on significant personal and social problems and which involve learnings of common concern to all youth." Krug⁵ recognizes as core only those block classes which have for their sole commitment "to help youth work on their major personal and social problems and needs." He specifically eliminates double-period classes which correlate, fuse, or unify subject matter and which are concerned with "the thickness of the slice rather than with the nature of the cake." To Smith, Stanley, and Shores⁶ the primary emphasis in core is on effective social living. They rule out as a major feature of core personal interests and needs of adolescents and make the assumption that a "latitude of a broad area of social living provides ample opportunity for both the play of children's interests and the satisfaction of their needs." Although these interpretations of the fundamental purpose of core vary, they all imply the complete disregard of subject boundaries and the development of problems without regard to classification according to traditional subject content.

Block classes which are true core recognize the importance to youth of acquiring skill in democratic living through actually practicing it in the classroom. Core issues may be topics to find out about; ideally they are problems to be solved. Problems grow out of the personal, social, or civic needs of youth. Problem-solving techniques are used. Working in groups and in committees is common practice. Activities are so varied that each member of a class, whatever his level of ability, will be able to participate and to feel that he is making a contribution. The core class may include activities often considered extracurricular, such as student council work, expression of hobby interests, and social activities which give practice in cooperative planning.

Pupil-teacher planning is a significant aspect of method. The extent of cooperative planning, or participation by pupils in planning, varies. In some schools there are preplanned curriculum guides or resource units. Scope and sometimes sequence have been predetermined. Teacher-pupil planning is then confined to activities within a unit. In other schools, joint planning begins with the selection of the unit, continues through the formulation of the objectives or goals and the activities which will achieve them, and ends with the evaluation of accomplishment of the class and its individual members.

Alberty recognizes the existing divergence among schools in the

⁴ Caswell, Hells L. *Curriculum Proposals for the Future*. In *The American High School*. Eighth Yearbook of the John Dewey Society, 1946. p. 143.

⁵ Krug, Edward A. *Curriculum Planning*. New York, Harper & Bros., 1950. p. 91.

⁶ Smith, B. O., Stanley, Wm. O., and Shores, J. H. *Fundamentals of Curriculum Development*. Yonkers, World Book Co., 1950. p. 472.

interpretation of the core-curriculum concept.⁷ Several of the six types of programs he includes in his analysis of current conceptions are subject-centered and teacher-directed.

Frequency of Various Types of Core

To discover the extent to which schools which have a core-type organization actually digress from traditional content and method, was an important purpose of the questionnaire sent out by the Office of Education during the school year 1950-51 to principals having core-type programs. Four types drawn from Alberty's six interpretations were briefly described. High-school principals were asked to check those statements which most nearly fitted the type of program in their schools. When more than one type was used, they were asked to check each, placing a double check beside the one which represented most common practice. The following table quotes the statements on the questionnaire and shows the percentage of 519 schools following each type of program in all classes, in some classes, and in most classes. It gives the information for the United States as a whole and for each of the five States which reported the largest number of schools having the core curriculum.

According to the interpretations of core given by most writers in the field, A and B are unified studies—core-type but not true core. Types C and D meet the criteria for core. Both are concerned with the problems of youth; they are pupil-centered rather than subject-centered. Type C followers adhere to the belief that certain problems are persistent in the lives of all youth and should therefore, be worked upon by each class. Type D allows free choice of problem selection. A total of 222 schools, or 42.8 percent of the returns received, report C or D type cores in one or more classes. It is fairly common to find two or more types operating in a single school.

Of the five States in which the core program has received its greatest impetus, California and Pennsylvania have by far the largest number of their schools in the Type A category, according to principals' reports. At the same time, Pennsylvania, more than any other State has the largest percentage of schools reporting Type D. Michigan uses predominantly types A and B. New York's schools spread themselves more evenly than do other States over the three categories A, B, and C, with A predominating. Maryland, with its state-wide program of core-curriculum development, is the only one of the five States in which Type A plays a minor role. Here, types B and C predominate with Type C reported slightly more frequently than Type B.

⁷ Alberty, Harold, et al. *How To Develop a Core Program in the High School*. Columbus, Ohio State University, 1949. unpubl.

CORE CURRICULUM DEVELOPMENT

Table 1.—Percentage of 519 secondary schools using each of four types of core programs¹

State	Number of schools	Schools using type A ²				Schools using type B ³				Schools using type C ⁴				Schools using type D ⁵			
		Exclusively	In some classes	In most classes	Total per cent	Exclusively	In some classes	In most classes	Total per cent	Exclusively	In some classes	In most classes	Total per cent	Exclusively	In some classes	In most classes	Total per cent
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
United States	519	31.6	13.1	8.9	53.6	15.6	20.0	7.3	43.0	11.4	17.7	8.7	37.8	2.7	9.1	1.7	13.5
California	59	50.8	15.3	1.7	67.8	20.3	10.2	6.8	37.3	1.7	15.3	3.2	20.2	0	1.7	0	1.7
Maryland	121	7.4	12.4	5.0	24.8	27.3	15.7	12.4	55.4	23.0	18.2	15.7	56.9	.8	5.8	1.6	8.2
Michigan	37	43.2	10.8	5.4	59.4	13.5	24.3	2.7	40.5	0	13.5	8.1	21.6	5.4	16.2	0	21.6
New York	50	22.0	14.0	18.0	54.0	12.0	26.0	10.0	48.0	10.0	24.0	6.0	40.0	4.0	8.0	4.0	16.0
Pennsylvania	41	41.5	17.1	14.6	73.2	2.4	17.1	9.8	29.3	7.3	12.2	7.3	26.8	12.2	17.1	2.4	31.7

¹ This table, as well as several of those which follow, includes data for the United States as a whole and for each of the 8 States in which usable reports were received from more than 25 schools.

² Type A.—Each subject retains its identity in the core; that is, subjects combined in the core are correlated but not fused. For example, the teaching of American literature may be correlated with the teaching of American history. The group may be taught both subjects by one teacher or each subject by the appropriate subject teacher.

³ Type B.—Subject lines are broken down. Subjects included in the core are fused into a unified whole around a central theme, e.g. "Our American Heritage" may be the central theme for a core unifying American history and literature, and possibly art and music.

⁴ Type C.—Subjects are brought in only as needed. The core consists of a number of broad preplanned problems usually related to a central theme. Problems are based on predetermined areas of pupil needs, both immediate felt needs and needs as society sees them. For example, under the theme, Personal-Social Relations, there may be such problems as school citizenship, understanding myself, getting along with others, how to work effectively in group situations. Members of the class may or may not have a choice from among several problems; they will, however, choose activities within the problems.

⁵ Type D.—Subjects are brought in only as needed as in "c" above. There are no predetermined problem areas to be studied. Pupils and teacher are free to select problems upon which they wish to work.

Changes Contemplated

Do schools plan to change from the type of core they are now using to another type? Most of the 436 schools replying to this question do not. When a change is indicated, it is in the direction of progress toward a more advanced type of program. Of the 77 schools planning to change, 26 now having type A cores only, plan to change to type B; 36 having predominantly type A or type B will change to type C; and 14 schools hope to develop their programs to become type D. Several schools report that while they have no definite plans to change, they are considering it, or that as soon as teachers are ready to progress changes will be made.

Extent of Use of the Core Curriculum

Nation-wide Use

HOW WIDESPREAD is the use of the core curriculum in public secondary schools? Is it spreading to more schools and to more grades within those schools? Complete answers to these questions will have to await a survey similar to the office's 1949 study which reported upon 545 schools of an estimated 833 located in 38 States and the District of Columbia. Data available from questionnaire returns in the present study and from other sources give certain indications of trends, however. There are indications of a positive nature in some States; there are indications also that some schools have discontinued core.

In the latter category is the fact that 74, or approximately 14 percent of the 545 schools included in the 1949 survey reported no core program in 1950-51 and that an indeterminate number of the 73 others who failed to reply may be assumed not to have a currently operating core program. In neither case is the evidence of discontinuance clear-cut. Most of the 74 principals wrote in the word "none." This may mean that principals believe the method and program they use is not far enough removed from traditional procedure to be classified as core. In fact, a number of these principals explained that they do correlate work, but not as core.

It is understandable that many principals who have a type of program which is merely a double-period subject-combination course and which has not evolved to the point of using problem-solving techniques would hesitate to report the course as core. Actually only a small minority of the 74 principals said they have discontinued core. Some of these explained that the core had been tried experimentally, but because of difficulties which arose, it was not established as a regular feature of the school's program. Difficulties which were specified included lack of sufficient number of teachers, changes in faculty, crowded conditions creating scheduling problems, and lack of public support.

Also on the negative side is the fact that schools in such cities as

Denver and Minneapolis have had either to abandon the core program or carry it on an elective basis because of serious public relations problems. Minneapolis, for example, which had 179 classes in common learnings in operation in the school year 1949-50 had only 148 in 1950-51. As a result of organized opposition to the program, the Board of Education voted to make the common learnings program optional in grades 7 to 12.⁹

On the positive side, however, are indications in several States, obtained through personal interview, correspondence, and a survey of the literature, that there is continued or increased interest in the core curriculum:

Alabama.—The Program of Studies and Guide to the Curriculum for Secondary Schools¹⁰ which marked the culmination of the 6-year curriculum development program, included suggestions for core curriculum organization. During this period the core program made considerable headway in the State. A recent study by Harvill¹¹ based on returns from 254 of the 625 white schools with grades above the sixth, shows the increasing impetus given to the core program before the war, the crippling impact of the war, and the expansion after the war. Eight grade levels were experimenting with the core in 1935-36; 35 in 1938-39, and 66 in 1940-41. The year 1942-43 marked a decrease to 52 with a further decrease to 48 in 1944-45, after which the swing again turned upward, with 57 grade levels in 1946-47 and a high of 95 in 1948-49, when the Harvill study was made. The 95 grade levels are in 43 schools, or 7 percent of those with grades above the sixth. Thirty-four schools which had had core programs at some time during the 13-year period had discontinued experimentation with the core. In the 43 schools which now have a core program there are 198 different core sections. Of these, 51.6 percent began their experimentation with core in the first four postwar school years; 20 percent of the total during 1948-49, the last year for which Dr. Harvill gathered data.

California.—A communication from the State Department of Education in December 1951 advised that a total of 175 schools (102 junior and 73 senior and 4-year high schools) had been reported to the Department as offering basic or core courses. This is more than

⁹ Cary, Miles E. The Fight Over "Common Learnings" in Minneapolis. *Progressive Education*, 23: 206-211, May 1951.

¹⁰ Alabama Department of Education. Program of Studies and Guide to the Curriculum for Secondary Schools. Montgomery, Alabama, State Department of Education, 1941. (Bulletin 1941, No. 6.) 279 p.

¹¹ Harvill, Hattie. Development of the Core Curriculum in Alabama Secondary Schools. Doctor's thesis, 1950. Nashville, Tenn., George Peabody College for Teachers.

twice the estimated total of 81 in 1948-49.¹² The large discrepancy here may be partially explained by the Department's inclusion of some schools which do not devote a block of time to the basic or core course and which according to the definition this Office has accepted would not be counted as core type. The Department in listing the characteristics of basic course programs includes the item, "The majority of the courses examined provide a block of time of two or more periods in length."

In Los Angeles, double-period English-social studies classes (the term "core" is not used) have increased proportionately more than have single-period classes in English in grades 7, 8, and 9, in the period 1948 to 1950, according to advice from the city schools office. The figures are:

Year	Double-period classes	Single-period English classes
1948	1,184	1,124
1950	1,409	1,163

Florida.—"There appears to be a growing interest in developing better programs in the field of general education, particularly at the junior high school level," was the advice of the State Department of Education in December 1951. A brief survey by the Department to discover where such programs are operating discovered 26 schools.¹³ This number compares with an estimated 24 for 1948-49.

Illinois.—Through the stimulus of the Illinois Secondary Curriculum Study an interest is growing in common learnings programs in schools in that State. Although the State still in 1951 has approximately only 20 schools using the common learnings, in 1948-49 there were fewer than a dozen such schools.

Maryland.—One hundred and forty-seven of Maryland's 188 public secondary schools in 20 of its 23 counties were reported by the State Department of Education in the fall of 1950 to be using a core program. No county was required to go into the program. Advice from the Department early in 1952 is to the effect that there is now no county in Maryland which does not have at least one school using core or core-type courses in junior high school grades. "The core program in Maryland ranges from the problem-centered approach

¹² Estimates in this section are based on the sampling survey made in 1949 by the Office of Education. (See footnote 1)

¹³ Moorer, Sam H. Core Curriculum in Florida Schools. *Florida School Bulletin*, 15: 7-11, June 1951.

involving science as well as social studies, to situations which do not represent much beyond the juxtaposition of English and social studies." The State Department is now looking toward the extension of the program into senior high school and has in preparation a bulletin of suggestions for its continuation in the upper school grades.

Michigan.—A survey by the State Department of Public Instruction in 1951 discovered 69 schools in Michigan having either a unified studies or core program, an increase of 5 over the previously estimated total of 64. Since the count of 69 is based on a 58 percent return of questionnaires sent out by the Department, the actual number of such schools is no doubt somewhat higher.

New York.—The State Department of Education estimates that about 100 schools in the State are experimenting with some type of core curriculum. (This Office's estimate in 1949 was 80.) The Department encourages such experimentation without officially recommending the program.

In New York City, the Junior High School Division has experimented with various types of core programs for a number of years. For the school year 1951-52, eight schools were officially designated as experimental centers. These schools organized a variety of core programs, in some combining English and social studies, in others, mathematics and science, depending upon the abilities and backgrounds of the teaching staffs. The eight principals have been meeting bi-weekly to discuss plans and report progress.

In the senior high schools, an experience core program was initiated in 1941 at Midwood High School in a few ninth-grade classes. In 1948, core classes for slow learners (the so-called XG Program) were introduced in eight schools. Pupils in such classes were scheduled for two periods and a homeroom with the same teacher. The program spread to other schools during the following years until, in 1951-52, 30 of the city's high schools used the XG Program.

As the program progressed with slow learners, some school people became interested in seeing it tried with heterogeneous and bright groups. In 1951, the Board of Superintendents approved a resolution empowering high-school groups to try out the program on a more extensive scale in a few selected schools with some additional funds authorized for the experiment. In two high schools, William C. Bryant and Long Island City, the core was instituted for all ninth-year pupils. Three of the vocational high schools are also experimenting with it in the ninth year.

Ohio.—The State Department of Education reported a trend towards the adoption of a core-type program in the lower grades of the secondary school. Staff members take the view that its spread will be slow. They pointed to an interesting aspect of the introduction of the core in two or three communities which reversed the usual procedure of staff asking parents. Here parents took the initiative in requesting schools to provide the program for their children.

The Columbus city school system is progressing with a plan for an experiment in the seventh grade of its 11 junior high schools. Groups of teachers working with the consultant in curriculum have developed resource units. At the same time, in an in-service course financed by the Kellogg Foundation, with credit allowed by the State University, a selected group of 25 interested teachers from the 11 schools has been preparing to carry two- or three-period block classes in 1952-53. It is hoped that these teachers will become leaders and resource people for further curriculum development in their schools. Next year a similar in-service course will be offered for administrators.

Washington.—In an attempt to survey the curricular practices in the junior high schools of the State, Burnett received responses from 54 of the 94 principals to the question, "Is there a trend in your junior high school toward a core program?"¹⁴ Forty-six schools reported a trend toward core; 4, a trend away from it; and 4 were moving in neither direction. Examination of the grade programs disclosed that 38 schools had a definite block of time scheduled for grade 7, 31 for grade 8, and 13 for grade 9. (The Office's estimated number of schools having core-type programs in this State in 1949 was 13.) It is further stated that, "The current tendency in most of the schools is to include three periods, or a half day, for grade 7, two periods for grade 8, and straight departmentalization for grade 9. However, several principals referred to the changes as experimental and expressed the intention of making the half-day core characteristic of all three grades as rapidly as is feasible. Twelve of the 16 schools that still follow the single-period schedules already have two or three teachers in each building experimenting with longer blocks of time for grade 7, with the possibility of moving in that direction if results prove satisfactory." Most of the changes, it was pointed out, have occurred during the past 5 years.

Wisconsin.—During 1950-51, the University of Wisconsin identified 44 junior and senior high schools with combined classes of two

¹⁴ Burnett, Lewis W. Core Programs in Washington State Junior High Schools. *School Review*, 59: 97-106, February 1951.

or more periods in or replacing such areas as English, social studies, mathematics, and science. An additional 27 schools carrying on such work for the first time were identified in 1951-52, making a total of at least 71 schools. (The Office's estimated number for this State in 1949 was 18.) The extent to which the core idea functions in these classes varies from class to class and from school to school.

In an effort to elicit opinions on the spread of core-type programs the State Teachers College at Moorhead, Minn., addressed inquiries to the several State departments of education, to 152 superintendents of schools in Minnesota, and to 150 members of the American Association of Colleges for Teacher Education.¹⁵ Two questions asked of the principal State school officials only, and the percentage of positive responses, are as follows:

Does evidence indicate that the inclusion of this type of program in the public secondary schools of your State is increasing, decreasing, or static?

73 percent reported that it is increasing.

In your judgment, is this type of program destined to become a dominant feature of curriculum organization in your State, or do you believe it to be one of the transitory fads in education?

67.5 per cent reported that they believe it to be a dominant feature.

Grades in Which the Core Program Is Provided

How widely is the core used in the schools in which it is found? Counting as one each grade in each school in which the core program is found, the 519 schools reported a total of 1,215 grades using the core curriculum. These are arrayed as follows:

Table 2. — Number of secondary schools reporting core programs in each of the grades 7 — 12

	Number of schools	Schools having core programs in grades						Total grade levels
		7	8	9	10	11	12	
1	2	3	4	5	6	7	8	9
United States...	519	401	355	268	90	69	32	1,215
California.....	59	50	43	38	13	7	1	152
Maryland.....	121	115	110	87	8	6	7	333
Michigan.....	37	27	21	14	5	5	3	75
New York.....	50	33	32	21	9	5	2	102
Pennsylvania.....	41	33	26	14	9	3	1	86

¹⁵ Robbins, Clayton D. Core or Broad Area Preparation. *Minnesota Journal of Education*, 31: 16-17, November 1950.

Principals were asked, "If the core is used only in the lower grades of your school, do you have plans to extend its use to the higher grades within the next year or two?" Ninety-nine, or one-third of the schools responding to this question, reported that they do have plans to extend its use to upper grades. Twenty-five other schools volunteered the information that they are in the "considering" or "testing" stage, or said they would like to extend it.

Use Within Grades

Of the 1,215 grades reported, 887 or 73 percent enroll 100 percent of their pupils in the core. Three hundred twenty-eight others enroll fewer than 100 percent of all pupils in the grade in core classes. Table 3 shows the extent to which 100 percent enrollment has been achieved in the States in which core has the largest following.

Table 3.—Number and percent of grades reporting core program which enroll 100 percent of the pupils in these grades in selected States

States	Number	Percent
United States.....	887	73.0
California.....	113	74.3
Maryland.....	313	94.0
Michigan.....	46	61.3
New York.....	52	51.0
Pennsylvania.....	56	65.1

Since by definition the core is composed of subjects required of all pupils, it is probably true in general that these grades are using the core on an experimental basis. Many principals who are actively interested in the possibilities of the curriculum realize that parents, teachers, and pupils also must be sold on this type of program if it is to be successful. Therefore, they do not attempt to establish it at once on a 100 percent basis. The principal may begin by having one or two qualified and interested teachers handle the double-period class for the first year, adding to the number as other teachers express interest or desire to try it. In these instances pupils also are often given a choice as to whether they will enroll in the core or the subject program. In a few schools, core is used only with special groups of pupils; sometimes rapid-learner groups are selected; more often all groups are chosen.

The range from 51 percent in New York to 94 percent in Maryland probably spells the difference between a decidedly experimental type of undertaking by individual schools and one which was introduced State-wide.

In order to discover something of the practice of selection in schools which do not have core uniformly throughout a grade, letters were addressed to a few high-school principals, chosen at random, asking about both pupil and teacher choice. Seven replies were received. One of these reported that the schools had in 1951-52 changed over from an experimental to a required-of-all program. Of the remaining six schools, four offered core on an elective basis; two did not. One of them expected to change to a required program as soon as space and staff permit. Two had had a required-of-all program and because of unfortunate public relations had been forced to shift to an elective program; another felt that because of staff attitudes it was advisable to continue the program as an elective. Five of the schools said that teachers have the option of teaching core or single-subject classes, one that teachers are invited to teach in the program but that no one is assigned to it, and one school, that teachers are chosen for core teaching.

In this connection one principal wrote:

Making the program optional brings a whole array of problems. However, we follow a very flexible policy insofar as it relates to changing from one stream to another. Teachers have the option of teaching core or straight. The best way to kill the core program (or anything relatively new) is to ask a teacher to do it who doesn't want to do it.

Our core teachers are uniformly happy with their experience. One of its greatest virtues is the cutting down on the number of pupils coming to a teacher during the day. That is very important.

Despite the optional aspect of the curriculum and despite much loose talk still about subversive influences, about a third of our pupils are in core classes. Incidentally this school is located in the highest income part of the city where the average level of educational background is highest. Ironically, educational change comes hardest in such a neighborhood. All of the leaders of the city's "antigroup" live within a few blocks of the school.

We have made some mistakes but most certainly we are on the right path in pursuing core. Time and an increasing effort to be more effective in our public relations will make our path easier, we hope.

A statement from Raymond Wilson, Principal of Murphy High School in Mobile, Ala., the largest high school in the South enrolling normally about 4,000 pupils, illustrates a generally recognized caution and deliberation in introducing the core.

Admission to the common learnings program is entirely on a voluntary basis and teachers are under no compulsion to serve in the program. Faculty members who evidence an interest in learning how to work in this area go through an intensive in-service period and begin gradually. The traditional mores of the community and the large size of the school have made a change difficult and a policy of gradualness has seemed wise.

We began experimentation with a common learnings program four years ago in our sophomore class. Our first core group graduated last year and a number

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of the graduates entered college in the fall. This silenced the charge that graduates of the core program could not get into college!

We began with 210 core pupils and seven teachers. The intention at that time was to carry this block of pupils and teachers through the three years. We took a terrific loss at the end of the first year and salvaged only 40 pupils of the original group to enter the second year of experimentation. Criticism by noncore teachers, fear on the part of pupils and parents of anything new, and our own ineptness in several ways were responsible.

After our first dismay at this adverse situation, we turned our bad luck into good by deciding to open up the core to any interested juniors and to let the others of the seven original teachers as well as one or two new converts begin with incoming sophomores. That year we had about 300 pupils in the core. The following year we had grown to 500, and last year to 800. For the current year (1951-52) we have over 1,100 enrolled in the core. We now have 20 teachers of core, most of them carrying two groups.

Dr. Wilson believes the fact that pupils may withdraw from the program at any time they wish and transfer to the traditional curriculum is an important safety valve at this stage of experimentation (the fifth year). Actually, however, he points out, very few have chosen to change over since that first year. Last year there were only 10, but the fact they know they can do so seems to work to the advantage of the core. "The fact that parents, who might form a militant opposition group if their children were forced into the program before we have ample time to prove the worth of the experimentation, can place their children in the traditional curriculum is a helpful fact."

Subjects and Functions In the Core Block

Subjects In and Correlated With Core

English and social studies, subjects required of all, are almost always the subjects upon which the core framework is built. The 1949 study of the Office of Education, previously mentioned, found that 91.9 percent of core-type courses replaced or included those two subjects. Some of these also incorporated science or mathematics or one or more other subjects such as art, music, and health. Occasionally English or social studies is combined with mathematics or science; infrequently science and mathematics are the basis of the core.

Even though English and social studies are the only subjects replaced by the core, the core does not limit itself to the bounds of those subjects. Core knows no subject-matter lines and the problem to be solved may draw from any areas of the curriculum that can contribute to its solution. The following excerpts from a report on the core program at Evanston Township High School are illustrative:¹⁸

The Core class includes in its program whatever aspects of the environment have a bearing upon the subject matter units chosen for study. For instance, in the course of a week, a pupil in Core will have had work in writing, discussions on current news, research, reporting and discussion on the chosen unit, time devoted to English skills, some experience with literature or the fine arts and perhaps a speaker, field trip or Core business meeting. Core is a many-sided program adjusted to the personal needs of its pupils and unrestricted by departmental regulations. This approach enables the pupil to gain a more realistic grasp of the interrelationships of the life about him and some perspective of his place in that life. . . .

Core is like English and Social Studies in that it prepares for college, rates the same units of credit, covers many of the same subject matter areas, and uses many of the same resource materials and examinations. It is unlike English and Social Studies in that it is taught by one teacher rather than two; the units of work it considers are planned by both pupils and teachers; it teaches by the problem-solving or project rather than the textbook method.

In some schools an attempt is made to correlate the teaching of one or more subjects with the unit upon which the core class is working. General mathematics, general science, and art are those most frequently used in this way, although other subjects offer possibilities.

¹⁸ The Core Program of E.T.H.S. Evanston, Ill., Evanston Township High School, 1950.

In a study¹⁷ to illustrate the ways in which subject fields can contribute to the development of a unit in core, a graduate seminar at Ohio State University having formulated an extensive list of suggested pupil activities for the problem area "Self Understanding," asked subject specialists to list the specific contributions, if any, which their respective fields might make to each of the suggested activities. Some of the 66 activities drew responses from as many as 8 or 9 subject fields without material seeming to be "dragged in"; some were restricted to 2 or 3. Examples of activities, with subject fields in which specific contributions were listed, are cited:

Construct and interpret a personal health record form. On the form, place such items as: height, weight, illnesses, accidents, habits of good hygiene (bathing, brushing teeth, washing hair, etc.), problems of health and appearance and plans for solving the problems. Use the form to keep a health record.

Subject fields: Agriculture, Arts, Business Education, Distributive Education, Health and Physical Education, Home Economics, Language Arts, Mathematics, Music, Science, Social Studies.

Make a display pointing out the inadequacies of certain diets, using food models or real food.

Subject fields: Arts, Business Education, Distributive Education, Home Economics, Social Studies.

Have a demonstration on make-up, hair styles, and care of the skin and nails. Set up a beauty clinic where pupils can care for their own and each other's hair, make-up, etc.

Subject fields: Arts, Business Education, Home Economics, Science.

Examine and discuss case studies of adolescents, such as excerpts from cases in "Adolescent Personality," by Bloa.

Subject fields: Home Economics, Social Studies.

Present sociodramas about differences in boys' and girls' behavior.

Subject fields: Arts, Home Economics, Social Studies.

Survey the community and make an inventory of opportunities for young people to associate with and understand one another. Invite the citizens closely associated with the provision of these opportunities to describe their agencies.

Subject fields: Agriculture, Distributive Education, Health and Physical Education, Home Economics, Language Arts, Mathematics, Social Studies.

To illustrate the functional participation of special-area teachers in the core program, teachers at Ohio State University School who were enrolled in the seminar—teachers of science, mathematics, music, related arts, home economics, and the school nurse—reported their experiences in contributing to the on-going core program in the

¹⁷ Albert, Harold, et al. *Utilizing Subject Fields in High-School Core-Program Development*. Columbus, Ohio State University, College of Education, 1959. 69 p. mimeo.

University School. Special-area teachers contribute in three ways: "(1) as an adviser in the preplanning stages of the development of the unit, (2) as a consultant in assisting with particular aspects of the study, (3) as a participant in assuming a major responsibility for the on-going study, or some particular aspects of the study."

Possibly no public school can provide the flexibility of program for its teachers, which makes such wide correlation possible, that University School does. A few schools are able to furnish opportunities for effective correlation by scheduling the same free period for all teachers of required subjects in any one grade, or for those having the same groups of pupils. Other schools add a half hour in the morning or after school. Planning time together permits consideration of the possibilities and advantages of correlation of other subject matter with each unit as it emerges and as it develops; it does not mean that unnatural or superficial correlation is undertaken.

Homeroom and Guidance

The core frequently takes over the functions of the homeroom. If the homeroom exists apart from the core, it usually serves only for routines, such as attendance taking and announcements. The core becomes the center for the school's guidance program. The core teacher spends more time with her pupils and consequently comes to know them better than can the teacher in a homeroom or single-subject-plus-homeroom situation. The longer periods with a single class reduce the number of different pupils a teacher meets in a day, week, or semester and this, too, gives her an opportunity to learn more about those pupils she does have. Thus the core program offers one of the most promising developments for improving a teacher's effectiveness in guidance.

The development of the core, from an administrative viewpoint, has been attributed by Krug¹⁷ to dissatisfaction of teachers and administrators with the homeroom situation. In his judgment, the homeroom was intended to deal with such matters as educational and vocational guidance, manners, getting along with people, and other needs, interests, and problems that arise in the life of the average youngster; he contends, however, that teachers were not prepared for this new function and the homeroom purpose frequently degenerated into a routine record-keeping and study period. Furthermore, what was done in the homeroom period seemed extracurricular rather than curricular. By bringing the homeroom into the core, the homeroom functions have become curricular.

¹⁷ Krug, *Op. cit.*, p. 21.

Schools vary in their practice and authorities differ as to the amount of guidance which may be left to the teacher. But, in general, writers in the field of curriculum believe that guidance is an important function of the core teacher. Faunce and Bossing¹⁸ put it this way:

The core curriculum offers a promising method of helping young people to meet their individual and social needs without setting up a dualistic organization of guidance apart from instruction. The core teacher would thus perform the basic guidance function in the secondary school, through his individual counseling contacts with his core students; through his study of group relationships in the core class, and through the kinds of problems that the core class undertakes to study.

Sixty percent of the 519 schools in the present study reported that homeroom was a characteristic feature of their core classes. Although the questionnaire did not ask about guidance, 30 principals wrote it in as being an integral part of the core. A study made in the State of Maryland¹⁹ may give an indication of practice. In answer to the question, "Is the core teacher in your school responsible for guidance?" 6 percent of the respondents said that the core teacher is completely responsible, 23 percent that he is largely responsible; 49 percent that he is responsible to some extent; and 22 percent that he has no responsibility for guidance.

While the core program does not usually eliminate guidance personnel, principals frequently report that it greatly reduces the number of interviews the individual pupil needs with the school counselors. In these cases the counselors work largely through the teachers, instructing them in ways in which they can be more effective. Only the more difficult problems are referred to the counselor for direct handling.

This is the method used at *Jarrett Junior High School, Springfield, Mo.* Diagnostic activities are carried on at the beginning of school in the general education (core) classes. Each teacher has two general education classes for one of which she is homeroom teacher and counselor. Guidance is both group and individual. A whole general education class period is sometimes set aside for talking with each pupil individually. Difficult problem cases are referred to the counselor who also works with the classroom teachers.

At *West Junior High School, Kansas City, Mo.*, there is a 10-minute homeroom period for routines; guidance centers in the common learnings (core) classes. Each teacher has two such classes for 2½ hours each and is counselor for the 60 pupils enrolled with her. An extra responsibility of the core teacher is to have lunch with one of

¹⁸ Faunce, Roland C. and Bossing, Nelson L. *Developing the Core Curriculum*. New York: Macmillan, Inc., 1951. p. 164.

¹⁹ Munnice, Richard A. *Characteristics of Maryland's Experimental Core Program*. Maryland Foundation, October 1950, p. 2, 29-40; November 1950, p. 6-7, 25.

these groups. This gives her additional time and a different situation for getting to know her pupils better. The counselor works with both pupils and teachers, but she feels that most guidance is done by common learning teachers.

"Senior core" at *Daniel Webster High School*, Tulsa, Okla., is essentially a group guidance device. At the beginning of the senior year batteries of tests are given—tests of mental ability, aptitudes, personal adjustment. After these are scored, each pupil is shown his cumulative record, including the results on these tests so that he can see whether or not he is going in the right direction. Senior core is set up in interest groups according to choices made in the junior year as follows: vocational orientation group, home and family life group, college-preparatory group, and secretarial group. As a result of tests pupils often change from one group to another. Groups retain their flexibility throughout the year and a pupil has the privilege of changing whenever he, and the staff think it best. The coordinator for senior core classes expressed the view that "each year we do a better and better job of discussing the meanings of tests with youngsters. Nonacademic pupils so often have come through school with the feeling that they are inferior. We try to show pupils that tests do not measure everything; that what is important is to find out what each pupil is best able to do."

At *Cloverdale Junior High School*, Lauderdale County, Ala., a young teacher who had been unusually well trained in core curriculum techniques was especially interested in the guidance possibilities offered by core. Health examinations were followed up, resulting in four class members acquiring glasses and two having tonsils removed. The core class spent one day in the Senior High School to which ninth-grade class members would transfer next year. The agriculture teacher from the Senior High School visited Cloverdale to orient his prospective students. This core teacher was preparing a folder for each pupil, representative of the pupil's work. The folder would include one book report, a personal summary of what that individual had accomplished during this year, and one original composition. These folders were to precede the ninth-grade core students to the Senior High School.²⁹

At *Evanston Township High School* personal counseling and help are always available to the pupil since the core teacher is his assigned counselor. "Effective guidance is further facilitated by the teacher's working closely with the parents, having the pupils two

²⁹ Merrill, *Op. cit.*

periods per day, going on trips and parties, and having continual association in the homeroom. The pupil also feels the support of the closely knit parent group and active homeroom social program."²¹

Guidance was an important purpose for the recent introduction of unified studies classes at *Denby High School* in Detroit. All ninth-grade pupils not enrolled in the several core or general education classes are now in double-period English-social studies, English-mathematics, or social studies-mathematics classes.

Funds were made available through the Denby Community Educational Organization to employ a guidance specialist as a consultant for the teachers of these double-period classes. Preliminary to organizing the classes this same guidance specialist conducted a series of discussion meetings in the building. Some forty-five teachers met in two groups, on school time, once a week for a semester. While the general theme was "group guidance" consideration was given to such problems as were of common interest to the participants.

In these unified studies classes teachers try to orient the pupil to the new school situation, to deal with problems of adjustment, seek the causes of failure to measure up to class work and school responsibilities, anticipate possible reasons for dropping out of school, and, in general, to provide whatever guidance may be needed or helpful throughout the first year of high school. Since a teacher has half the number of pupils which he would have in two separate classes and twice as much time with the same pupils, he has greater opportunity to know the pupil—to study his aptitudes, interests, and potentialities, and to try to meet his particular needs.

Extraclass Activities in Core

Related to both homeroom and guidance are activities that ordinarily fall in an extended homeroom or activity period and are considered extracurricular. Such activities frequently include school government planning, development of hobbies, and planning for class parties and other recreational activities. Many school people believe that extraclass activities, which are so often the main outlet the school offers for an expression of pupils' interests, should be absorbed into the regular school program. A recent publication of the Office of Education²² suggests 11 steps which a high school may take in a process of gradually curricularizing its extraclass activities.

The core class with its avowed purpose of serving the personal and social needs and interests of all pupils offers the optimum advan-

²¹ The Core Program of E.T.H.S. *Op. cit.*

²² Tompkins, Ellsworth. *Extraclass Activities for All Pupils*. Washington, U. S. Government Printing Office, 1946. (Federal Security Agency, Office of Education, Bulletin 1946, No. 4.)

tages for some kinds of extraclass activities. Time is available for continuous effort when that is needed. Group and committee work is the technique most often employed in extraclass activities; group and committee work is the basic technique of core-class work. Solving the problems of core requires, or allows for, a great diversity of activities; each individual's talents have an opportunity to be used. Working on common problems with the opportunities that gives for getting to know each other better, tends to make the core class a social group; desire for common participation in social activities arises spontaneously. At Evanston, for example, each core includes in its program parties, trips, picnics, and extraclass activities in which individuality may be expressed and friendships formed. Pupils come to feel that their core classmates are a special social group in which each student has a kind of family membership. They thus have a feeling of "belonging" which is not always achieved in a large institution.

With such possibilities open to them, how many schools have taken advantage of the opportunity to include some extraclass activities in core? According to reports of high-school principals who were asked whether school activities were a characteristic feature of their core classes, nearly half (248 of 519) have done so.

Use of Ability Grouping

Writers in the field of curriculum who refer to ability grouping in relation to core are agreed that it has no place there. Spears says, for example, "In the core program a natural social situation is asked, since behavior rather than subject matter is at stake. Naturally, ability grouping would have no place in the scheme."²³ Anderson likewise believes that, "Since the experiences in the core are supposed to be common learnings basic to all, grouping into classes on the basis of intelligence or future vocations would be out of place. One of the essential experiences of living in a democratic society is learning how to live with others different from oneself in abilities, vocational objectives, social level, ethnic grouping, race, or family background."²⁴

The core represents a living-together type of situation. It affords opportunity to learn how to get along with others in work and in a social setting. It recognizes that people who are different have a variety of different types of contributions to make. A unit of work in core, with the many activities involved, presumably affords the opportunity for exercising varying abilities.

To discover the extent to which practice agrees with theory in this regard, was the purpose of one item on the questionnaire. Principals were asked the degree to which ability grouping is used in assigning pupils to core classes. The 500 responses to this item, distributed themselves as follows: Not at all—52.4 percent; slightly—15.4 percent; one of several important factors—22.4 percent; and the principal factor—9.8 percent.

In the latter two categories are schools which use core with particular types of pupils, usually the retarded, as the best method of instruction. Such are the C.R.M.D. (special classes for children of retarded mental development) as well as XG classes for slow learners, or low average, in New York City. A few schools group pupils in core classes according to ability in some grades, but not in others. One school reports that it uses core only in grade 11B for

²³ Spears. *Op. cit.* p. 104.

²⁴ Anderson, V. E., Criss, P. R., and Grubb, Wm. T. *Principles and Practices of Secondary Education*. New York, Ronald Press Co., 1951, p. 126.

a small group who are above average in reading ability. Another school which has core only in the twelfth grade and enrolls but 17 percent of its pupils, says that in practice the groups are high ability groups by free selection. Several schools reported that reading level was the factor considered in assigning pupils to core classes.

Approximately one-fourth of the schools use ability as one of several important factors in assigning pupils to core classes. When several factors are considered it is doubtless on the theory that pupils of a similar maturity level can feel a belongingness and sense of security that is often more difficult to achieve in completely unselected classes. *Central School, Orchard Park, N. Y.*, a school in this category reports that pupil assignment within the various seventh and eighth grades seeks as its goal the establishment of workable groups. It believes that extreme ranges of student ability, maturity, and realized growth do not constitute a workable group. Criteria for establishing such groups depend largely upon observational interpretation. However, teacher judgment is supplemented by objective testing of various kinds and both are used to answer the questions:

- What is the nature of demonstrated maturity?
- What is the degree of command of basic skills?
- What has been the educational background?
- What elements characterize the pattern of social behavior?

Answers to these questions are evaluated to determine the group assignment most advantageous for the individual from the viewpoint both of what he can contribute and what he can gain. As the number of groups is limited, the final decision is something of a compromise and adjustments in grouping follow whenever they appear advisable. Every care is taken, in forming planned working groups, to make clear to the individual pupil that he is working with others whose needs are similar, toward the realization of common goals.

Gillespie Junior High School in Philadelphia, which reports itself in the "not-at-all" category recognizes the difficulty frequently encountered of involving all pupils. From group study meetings have come mimeographed lists of techniques for meeting individual needs. One list, for example, is "Creative writing—the gifted pupil"; a companion list is "Creative writing—the retarded pupil." Another group study report lists the following devices and procedures for getting those who do not participate to recognize that fact and to accept some responsibility:

- Sit with a small group of such pupils and work with them until each can take back to his committee a contribution.
- Help each one to find some way of expressing his thoughts and reactions without the use of writing.

- Find a service job for each to do.
- Have after school individual conferences on a friendly basis to determine the reasons for withdrawal.
- Assign an interested student as partner in a "mutual aid" arrangement.
- Form an auxiliary committee of them and put them at the disposal of all other committees. Pupils will soon call on them for immediate assistance which will help them to feel needed, wanted, and will give them prestige. Such jobs are getting books from the library, hunting up needed facts, making posters, putting material on the bulletin board or blackboard, getting and distributing tools and books, doing whatever may be needed at the moment to get better ventilation or light, helping to clean up before the bell rings, moving furniture, doing a repair job that is needed at once.

Pupil Marks in Core

"Does the method of marking used by the school require that separate marks be recorded for each of the subjects unified in the core?" was an item on the questionnaire to which 480 of the 519 high-school principals replied. Sixty-seven percent reported that separate marks are required; 33 percent that they are not. Fewer than one-fifth of the latter group are schools which include one or more of the senior high school grades 10, 11, or 12 in the core program. In quite a few instances principals reported the use of a single mark in grades 7 and 8, but said they found it necessary to record separate marks in grades 9 and above.

The necessity of furnishing separate marks on transcripts for colleges and universities is the reason most frequently given for marking by subject. The requirement is definitely a restricting factor. Since it is unusual to find schools not reporting separate marks for subjects replaced or included in core in senior high school grades, letters were written to several of the 25 high schools which had reported no breakdown by subject, inquiring as to their practice. Three acknowledged that they do have separate marks above the eighth grade. A fourth school replied that no marks or report cards are used, but that informal letters are written to parents, and conferences are held with pupils and with parents. State colleges, it was stated, accept the school's graduates on the basis of number of credit units. The remaining six schools wrote that they do not usually record separate marks.

Edison High School, Stockton, Calif., records the core as "Basic (Eng., SS.)" on its permanent record cards. The principal writes: "Two years ago our teachers agreed to use only one mark for the core class. They felt that the work was too integrated in the various units that we use to justify two separate marks. Our parents understand what we are doing and have not complained."

The cumulative record card used at *Whittier Union High School*, Whittier, Calif., breaks down the basic course title into the hyphenated words, English-Orientation, English-World History, English-United States History, Civics-Senior Problems. The principal ex-

plains they have found this necessary to satisfy the various colleges and institutions of higher learning which their students attend. Transcripts are rubber stamped with a breakdown of the course. Report cards carry the words in common use in the high-school description of the basic course: English Orientation (9th grade), World Cultures (10th grade), American Life (11th grade) and Senior Problems (12th grade). One mark is given and the students and parents understand this mark represents two units of work. Symbol marks, A, B, C, etc., are used, as is uniform practice in California schools.

From the principal of *Wayne High School*, Wayne, Mich., comes the following statement:

The cumulative records of our students carry a single mark (A, B, C, etc.) indicating performance in the two-hour block of Basic Communications, a required course for freshmen and sophomores. No attempt is made to distinguish between English and social studies which are really the two subjects fused into Basic Communications.

The use of letter marks is inadequate but we shall continue with this form until such time as a reasonable agreement has been established between high school and universities and more adequate methods put into use. For our own purposes forms are used upon which attitude, prediction of success, emotional blocks, etc., are indicated. We feel that this information is much more valuable than the impersonal letter marks which are continued only because they "make sense to the colleges."

Kitzmilller, Md., High School which records a single mark in core, breaks it down for pupils going to colleges which require separate marks. *Oakland, Md., High School* uses the symbol marks A, B, C, etc. for recording accomplishment in "core." In furnishing a transcript of marks to the colleges the school writes in "core" and supplies the marks, with a footnote explaining that the core consists of English and social studies.

Roosevelt High School in Minneapolis reports that it has not found it necessary to mark the two separate subjects, English and history. Teachers give written reports of progress and suggest improvements necessary. The principal writes, "Our university has been willing to accept the credits recorded at the end of the year just marked as 'Credit' and we have not had to break down the marks. However, this has not been true of some institutions of higher learning outside the State, especially in the East, and we have recorded the old A, B, C marks in separate subjects for their use."

The Core Class and Its Teacher

Activities and experiences provided youngsters in types C and D core classes are as varied as the needs of the class, the exigencies of the situation, the materials at hand, and the ingeniousness of the teacher permit. The teacher and the class, not the textbook and the teacher, control the situation.

The core teacher, like teachers of other classes, is the key to the atmosphere that pervades the class. To a much greater extent than in other classes, because of the lack of prescribed content, the teacher of core is accountable for the total of pupil-learning. Without the able direction and guidance of an understanding teacher much of the time spent in core can be lost.

In order to provide the most help for teachers and other school people who have not had an opportunity to observe core classes or to visit schools, several forward-looking programs and classes in action are described in detail in this section.

Program at Denby High School

"A Core Class in Action" is the title of a filmstrip prepared by Rosalind Zapf, core teacher at Denby High School in Detroit. Each term it is shown to the parents of the school's entering ninth-graders who have enrolled in core to acquaint them with the type of experiences their children will have. In the following statement Miss Zapf tells the story which she uses to accompany the showing of the filmstrip.

A teacher explains core

A ninth-grade core class is used in the filmstrip, "A Core Class in Action," to show the nature and procedures of core class work. This is where we lay the groundwork for the establishment of patterns of working and planning as a group. Classes are the same size as those of the rest of the school—the average is 35 throughout the school.

[Miss Zapf, like most teachers questioned, believes that 25-30 is the optimum size for core work.] The room has movable seats, cabinets, filing cabinets, bookshelves, tables, and a room library, but we could certainly use a great deal more equipment in work of this type.

One thing we definitely try to do at the beginning is to build a friendly pupil-teacher relationship. We want the children to feel that the teacher wants them. This classroom should contain many of the elements of a home situation.

We explain to them why the class is set up: to think with other people, to work with other people, and to solve problems in the best way possible. We planned the core on the assumptions that in order to live in a democratic society the individual needs to be able to face his problems, study all aspects of them, and to do something about them. We assume that he can't do these things unless he practices them. A third assumption is that the skills and techniques needed for this are those involved in thinking with other people, working with other people, and solving problems in the best way possible. These are skills and techniques necessary for a citizen living in a democratic society.

In the beginning there is a unit on orientation which is pre-planned to a certain extent. Youngsters come from 10 or 11 schools and we need to take time to get to know each other. Many techniques are used to help class members get acquainted with one another—name plates and introduce-your-neighbor stunts. The teacher, too, must let pupils get acquainted with her; they must know something about her life. As a youngster tells a little about himself the teacher tells a little of herself. The California Personality Test, Mooney Problem Check List, interest tests and autobiographies written by pupils after they have been in the class about a month and feel safe in telling things, and a sociogram help one know more about them.

During the orientation period we learn all we can about the school clubs and other school activities in order that pupils may become a part of the whole school picture as soon as possible and not be tied to the core. Representatives from the various clubs are brought into the class to tell the pupils what activities are carried on and how they may become members. We find in general that our core pupils belong to more clubs than non-core pupils. We also find that in the twelfth grade many class offices are held by core pupils. We feel that this means that these people have learned to work with other people and that they have had a wider experience. During the orientation period we also spend time in getting acquainted with our room library which is built up out of a 50-cent fee charged to each pupil at the beginning of the semester in lieu of a textbook.

After orientation we go into a democracy unit in which we discuss

methods of working and getting along together. We use films on democracy. We have discussions of our country, our homes, our clubs as democratic organizations. We then consider the possibility of having a school class become a democratic organization. We go ahead on an "if" basis. If our class were democratically operated, what rights and responsibilities would we have? In this kind of a situation what would be my rights and responsibilities as a teacher? I have to make it clear that I am one of the group, and no more. I have one vote and no more. Having finally decided to organize as a democratic group we elect our officers. Some groups wish to write a constitution; others do not.

At this time the class decides on the goals toward which they wish to work during the semester. No two groups select identical goals. I have more success with goals set on a semester basis than with the use of unit goals.

It takes about a month to get this far. The next step is to select problems for study that are of real importance to the members of the group. Criteria for selecting topics are set up. The teacher must help pupils to see that other factors beside interest enter into the final choice. Topics are then suggested by class members and these may number as high as 40 or 50. Sometimes one problem is selected by the class with small groups working on different aspects of the problem according to their greatest concern. Sometimes 6 or 7 problems are selected, each being studied by a separate small group.

Each group then makes a general plan of work for itself indicating what the group members want to find out, how they plan to get their information and how the work is to be divided. Then they start to gather data. They use libraries—school, home, and neighbors'. Here opinion as to what makes certain materials good and others not good comes to the fore. We may go to visit the police department or have representatives come in to talk to us. We may go out into the community interviewing the parents—sometimes a whole class goes; sometimes a small group. We make plans for such interviews carefully. A lot of decision-making which is so fundamental in core work is involved. Sometimes we can take a bus trip, but not too often because of the expense.

We learn how to record our notes and how to list references. English comes in as a means of communication.

Every few days we come to an activity that is the heart of core procedure: working groups get together to discuss their findings and make further plans. As to group working techniques, we have a lot of discussions on good group activity, on the ways we want to work. Youngsters do not know how to work together because they have been accustomed to working alone.

We do a lot of handwork—charts, models, drawings, etc.—as much as we can on a creative level.

After about 3 weeks groups are ready to report their findings to the class. Many different ways of reporting are utilized. Following the reports, the entire class participates in a general discussion of the data and considers what actions, if any, may be taken.

Then we evaluate—discuss our successes and failures. Did we do good group work? What did we not do well? Evaluation is class, group, and individual. At report-card marking time we have to mark in terms of A, B, C, D, or E. In order to make it less teacher-controlled, pupils evaluate themselves on each of the items listed in the goals that were set by the class at the beginning of the semester. The teacher then does the same in a second column. When marks disagree we get together, talk it over, and try to understand the other's viewpoint. If we still cannot agree, the pupil's mark stands with the idea that in the next 6 weeks we will frequently talk over progress.

On the day that the writer visited Denby, she observed a core class which provides an excellent illustration of (1) how a problem of real and immediate concern to the class is allowed to take precedence over the program which had been planned; (2) the effectiveness of core in developing group interest and responsibility; and (3) the interaction of teacher, pupils, and counselor in a group guidance situation.

A prospective drop-out is the concern of a core class

The chairman of the tenth-grade core class checked attendance. He inquired about Frank who had been out for 2 or 3 days. Someone said he was planning to quit school. The faces of all were at once expressive of dismay. Only last week the class had recognized Frank as a problem they should do something about. His attendance record was growing worse. When he was present, he said very little. The first decision made by the class was that Frank should have a seat that was more in the middle of the group. Thus, on this day when Frank was absent, they arranged a shift of Frank's seat, and in order that he would be none the wiser, everyone in the class took another seat.

Now the class was unanimous in wanting to do something to keep Frank with them. After all it was only 4 weeks until the end of school. "Is he failing?" one pupil asked. Miss Zapf volunteered that she had checked Frank's record and found he was not failing in any of his subjects. Discussion was animated: "Should we try to make him feel that we want him and urge him not to quit?" "We need to let

him know he is wanted in the school." "Every place he goes, he goes by himself." "Frank doesn't talk to many pupils; it is not that he doesn't want to talk, it's that he doesn't know how." Miss Zapf spoke up, "We seem to be finding a story we should have been conscious of earlier."

The discussion that followed revolved around what form their action should take. Should the counselor talk to Frank or should the whole class do it. Most pupils felt that "if all 36 of us talk to him, showing him we want him it would be more effective." One boy who seemed to know him best proffered the opinion that he thought Frank would quit anyway. Miss Zapf suggested that even if he does, would it not be better for him if he knew we wanted him? The class thought it would be wise to ask his counselor (there is a counselor for each 500 pupils) to come in now to talk with the group and one pupil accordingly was sent to find Mr. C. ———.

In the meantime, discussion continued. A suggestion that gained favor was that Miss Zapf should call Frank and ask him whether, as a favor to the class, he would come in the next day. One pupil suggested she ask him as though she herself wanted to talk with him, not the class, because he would become self-conscious and probably would not come. Others thought it would be better if one of the class members asked him.

Then discussion turned to how the situation could be handled in class if Frank could be induced to come in. Should one person take over? Should it be a boy or a girl? Perhaps it could be two people—a boy to start it off, a girl to pick it up, and a boy to finish it off—then the group could come in on the discussion as they are doing today. Even though Frank might be overwhelmed by so much attention, the class thought he should know how they felt.

At this point the counselor entered the room and was told the situation. Mr. C. ——— said that, of course, he would try to urge Frank not to quit, but if he insisted on doing so he would ask him to go to his classes at least one more day in order to report that he was leaving. Then, he said, the class could follow through with its plan. He thought it was a very fine gesture on the part of the student-body to let Frank know how they feel even though he does quit school. And so it was left that Miss Zapf would telephone Frank.

This was not at all the problem that was scheduled for discussion that day. There was to be a report on juvenile delinquency. But the teacher realized that the class was sincerely concerned about the loss of one of its members. She explained to the observer that, "There is a 'we' feeling in the group. Pupils send cards when someone is at home sick. They give a party when someone leaves. This is our home."

Experience Curriculum at Midwood High School

Pupils at Midwood High School in New York City enrolled in ninth-grade experience curriculum (core) classes keep a diary of the class's activities. The responsibility for reporting the day's activities rotates among the pupils of the class so that at the end of the year a complete story as the pupils experienced it is recorded. The following story is the diary of the class on September 20, two weeks after the opening of the fall term:

A pupil describes a day in core

Alive and ready to work we came into our official class at 10:06. With the help of the class Miss R—— put the agenda on the board, as follows:

1. Check homework.
2. Minutes and evaluation.
3. Study run-on sentences.
4. Report on Corwin's "Note of Triumph."
5. Letter to Mrs. G—— to be chosen and sent.
6. Organizing questions into topics.
7. Choosing a science unit.

The minutes were read and corrected for English and content. Herbert was congratulated for his work. Irma gave her report on Corwin's "Note of Triumph" and many children who had never heard of Norman Corwin now know of this famous radio writer. Also Maurice reported on "In Memoriam"—The Life of Franklin Delano Roosevelt. We then worked on run-on sentences taken from our papers.

Irma's thank-you letter to Mrs. G——, who showed us around the cafeteria and kitchen yesterday and who answered our questions about the subsidy lunch and explained the equipment to us, was the one chosen by the class to be sent. We then turned to the unfinished business of organizing our questions about the "City of Midwood" into topics. The topics chosen after much discussion and debate were:

- I. Self-Government (Executive and Legislative).
- II. Student Court.
- III. Cafeteria.
- IV. Who's Who in Midwood.
- V. Scholarship.
 - A. Honor societies.
 - B. Course of study.
- VI. Service.
- VII. Extracurricular Activities.
- VIII. Publications.
- IX. Facts and Figures.
- X. Floor Plans and Interesting Places.

We next turned to the election of officers which had ended so po-

cularly the other day. Maurice, Herbert, and Joan were nominated for President. The vote was 20 for Joan, 14 for Maurice, and 2 for Herbert. Maurice and Herbert were good losers and congratulated Joan. We are going to have a losers' party. I should say we have quite a few politicians in our class judging from the campaign speeches. For Vice President, Maurice, Allen, and Herbert were nominated. The final vote: 18 for Maurice, 10 for Allen, and 8 for Herbert. We decided to postpone the election of Secretary until tomorrow.

We discussed our parents' and friends' opinions about our previous election trouble and again the class reviewed the importance of voting in a democracy.

Two covers were submitted for the minute book by our Art Committee. Joan's was chosen with a few changes. After recess we again turned to the discussion of our topics. After much discussion as to how we could best do our work David suggested committees. The class decided on the following aims for committee work:

1. To give us a more thorough knowledge of the work.
2. To teach us to cooperate.
3. To add interest to our work.
4. To learn to listen to others and to evaluate.
5. To develop the thinking process.
6. To save time through division of labor.

Committees were appointed and for homework each Committee was to choose a topic and list its goals and its proposed activities.

We were to pick a science unit, but the class was so excited by the news that the world was about to end that it became our first science lesson. Newspaper items were discussed in answer to the question, "What evidence was presented to prove the theory?" The class learned the difference between a dream and a fact. A Committee of two was appointed to investigate the scientists' opinion on the subject. They are to report Thursday. We then discussed a definition for science. Many excellent answers were given. However, we checked with the dictionary and discovered four definitions were given. The class was asked to pick the one that applied to our work. We also learned that the word came from the Latin *scire* which means to know.

The bell rang ending a compact, eventful, and interesting day.

Seventh-Grade Program at East Lansing High School

East Lansing, Mich., High School has had a core program for 7 years, enrolling all pupils in seventh and eighth grades. The writer spent a morning observing one of the seventh-grade classes and conferring with Yvonne Waskin, the teacher in charge, who emphasized the importance of the teacher's role in the success of the core.

A visitor observes core and talks with the teacher.

Class.—A seventh-grade class of 30 pupils, seated in a circle around the room. Although ability grouping is not practiced, the group is above average. The high school is in effect a college-preparatory school since 90 percent of its pupils go on to college.

Setting.—A bright and attractive room. There are colorful drapes at the windows. Bulletin boards and blackboards are covered with exhibits and drawings, in color, related to the work of the two core groups which use the room: an exhibit of the auto industry in Michigan; another of resorts; another of health in Michigan; another of natural resources. News clippings of current events are displayed. There is a small but adequate room library of books and magazines. The teacher reports that there is also a large school library with a good clipping file.

Time.—Usually the class meets from 8 to 10 a.m. with a short break between the first and second periods, but since this was assembly day, the double period closed at 9:30.

Teacher assignment.—An experienced teacher of core, Mrs. Wasikin is assigned two core groups for two periods each; one of these groups she has for a third period which is study hall. The sixth period of the day is free for planning and conference. She finds she knows better the pupils she has for the three periods. She is responsible for the guidance of both groups of pupils.

Pupil-teacher planning.—Formerly, the grade studied South America. Now each class has free choice as to what it will undertake. It was reported that there are about 10 general topics that evolve from teacher-pupil planning: something about personal problems, home and family living, current affairs in the world today (Korean conflict, for example), something about the school, the community, government, democracy versus communism, crime and punishment, conservation, and health. Pupils, of course, suggest much more specific items. Units studied are sometimes stated as problems, sometimes not.

When it is time to select a new unit, pupils look at the list of topics they made at the beginning of the year and decide which should be undertaken next. Interest may be stimulated by the preceding unit; on the other hand, there may be no connection. Their list to begin with is quite long, too long to include all. Sometimes they combine two. Also, they may add other units as they go along.

At the beginning of the term the class considers what it hopes to accomplish during the year and draws up a list of goals under the three headings: To Improve Ourselves, To Improve Our Work, To Improve Our Group.

Teacher's goals.—The teacher, too, has drawn up a list of goals for herself:

- I. To give students an opportunity to practice democratic living so that they may develop an understanding of democratic rights and responsibilities.
- II. To help students gain skill in communications.
 - A. Improve ability to write, incorporating clear thought as well as good word usage, punctuation, sentence structure, and spelling.
 - B. Improve silent reading for comprehension.
 - C. Improve oral reading.
 - D. Improve speech through reports and discussions, with attention to clear thinking, correct word usage, and correct pronunciation.
- III. To help students develop skills in identifying and solving problems pertinent to their everyday lives.
- IV. To develop good work and study habits.
- V. To develop skills in working with others.
- VI. To foster an understanding of and an appreciation for the peoples and problems of the world.
- VII. To develop worthy ideals, attitudes, and appreciations.
- VIII. To help students gain skill in evaluating themselves and their work.

The day's program

8:00 The class was called to order by a pupil-chairman who took the roll, then conducted a business meeting, a daily feature of the class procedure. The room committee was asked about the exhibit for Decoration Day. The refreshment committee for a class-sponsored food sale and party being held to earn money for the seventh-grade treasury, reported on the responsibility of individuals.

8:10 When the business meeting had adjourned, the teacher called for a report from the Student Council representative on yesterday's meeting at which a proposed amendment to the constitution was discussed. It was later explained that Student Council is new to these pupils and they find it hard to understand all the details. Seventh and eighth grades are represented on the Council, but they may not veto.

- 8:20 The Committee on Resorts presented a skit in which each participating pupil gave a report on the places in Michigan he had visited the previous summer. Reports were followed by questions and suggestions for improvement. The teacher also suggested ways in which reports might have been improved. Considerable interest was shown by the class in the reports and the method of presenting them.
- 8:45 A report was made by an individual who had been the only one to choose the topic of Michigan's natural resources. The class again made comments of criticism and approval.
- 8:50 Next on the agenda was the *Junior Scholastic*. One period each Wednesday is regularly given to discussion of the current issue based on the pupils' reading of the night before. The teacher remarked that she didn't know what the committee in charge had prepared, but she hoped it was something interesting.
- The pupil-chairman taking over at this point announced a quiz show with prizes for the winners. A pupil would have only one chance at a question. The emcee was copiously supplied with quips and stage properties as well as prizes of pieces of candy and gum. There was obvious enjoyment of the program, as well as interest in answering the questions correctly.
- The class was so pleased with this type of presentation that it asked for a repeat for the following Wednesday. One pupil suggested the emcee should not have to pay for prizes. It was agreed that since it was a class project money should come from the treasury.
- 9:20 The teacher advised the class that tomorrow they would have an evaluation of the unit on Michigan. She asked that pupils be prepared to answer such questions as: How much did I learn? Did I cooperate with others in my group? How well did I present my oral report? Did I do the best I could? Did I organize my work well? Did I solve the problem I was working on? Was my written report the best I could have done? Did I choose a good topic?
- Tomorrow there would be discussion of the story read in literature and work on the verb "to be" which was being used incorrectly in pupil reports. (There is no set formula for English grammar as such. The teacher is careful to bring to the attention of pupils mistakes they make in English. When she finds some area in which they are doing poorly, she gives them practice on that. The class has both a literature textbook and a grammar.)

The core teacher views her role²³

We cannot expect a group of children to operate democratically unless we help them to understand democratic rights and responsibilities. They must live and practice these principles in order to appreciate and understand them. While they are having these experiences, however, they need most skillful help.

Working democratically with a group of students requires strong

²³ Contributed by Yvonne Washin, East Lansing High School.

but unobtrusive leadership on the part of the teacher. She serves as a guide and leader in every phase of class activity. She is careful to allow students to make their own decisions, and at the same time she carefully injects ideas of her own which will help them to make wise ones. She is not afraid to let students make mistakes. When mistakes are made she helps them to evaluate their procedures and benefit by those mistakes thereby creating a real learning situation. She is willing to allow students freedom to move around and talk with one another in working situations. If an occasion arises where some students are interfering with the progress of others, she is prepared to take the necessary steps to ensure maximum participation from everyone.

As a member of the group, the teacher makes suggestions about projects that the class might undertake, and yet does not force her suggestions upon the group. It is the teacher's responsibility to point out to her students the areas in which they need work and to provide situations whereby individual students can succeed according to their abilities. The responsibility of the teacher for her students' growth in all learning phases is not lessened because her class is operating democratically. There are many areas of growth to be concerned with in addition to the skills that are stressed in a more traditional classroom.

Helping students to plan together, to work together, to make wise decisions, to evaluate themselves and their work is a sizable undertaking. Add to this the responsibility for providing for individual differences and helping students improve in fundamental processes and the task becomes even greater. To accomplish this, the teacher must be constantly alert to every situation.

The attitude of laissez-faire cannot succeed. Children need expert leadership. The teacher is the most important single factor in any class. This is especially true in a class operating on democratic principles. It is not an easy task. Success in this area means willingness to work cooperatively with children and to give and take as the situation demands. The results more than compensate for the worry and effort involved. It makes the job of classroom teaching challenging and satisfying.

PART I 2

PART II. PROBLEMS AND SOME WAYS OF ATTACKING THEM

Major Problems Affecting the Operation of the Core Program

HIGH-SCHOOL PRINCIPALS were asked, "What are your chief problems in operating a core program or in furthering its continuous enrichment?" Of the 447 principals who replied to this item of the questionnaire, more than three-fourths listed at least 2, and often 3, 4, or 5 problems. Even those schools which have an especially promising core curriculum in operation have not been able to overcome all of their handicaps. As illustrative, the problems as they were reported by principals of 4 such schools are given here:

School A: 1. Staff—core teachers.

2. Time for planning.

3. Cooperation of other members of the school system.

4. Instructional materials that are adaptable.

School B: 1. Teacher training and obtaining adequately trained teachers.

2. Administering program when large portion of school is included.

3. Curriculum development.

4. Public relations—getting patrons to understand and accept program.

5. Evaluation.

School C: 1. Classes are too large.

2. Developing a feeling of security in the teachers involved.

3. Developing simple but adequate methods of helping youngsters learn to do group work.

4. Determining actual needs and interests of pupils.

5. Finding teachers willing to struggle with new problems.

School D: 1. Teachers who feel secure in core teaching.

2. Ability of teachers to find problems which are real to pupils.

3. Time for planning for all teachers.

4. Available and usable reading materials for pupils.

A perusal of the separate items which high-school principals having the core curriculum in their schools list as their chief problems gives, in reverse, a bird's-eye view of the essential ingredients of a good core curriculum. The problems have been grouped and are listed here in considerable detail because of the value they may have from that viewpoint.

*Problems related to the core curriculum reported
by 647 high-school principals*

*Number of
principals
reporting*

TEACHERS OF CORE

Lack of or difficulty in obtaining properly or adequately prepared teachers	225
Teacher adjustment: traditional attitude and emotional reaction against change	65
Necessity for constant in-service training of teachers	62

Specific comments that are typical

- Teachers' failure to understand the objectives of the core program.
- Reluctance on the part of teachers to give up traditional methods of teaching.
- Lack of interest on the part of teachers.
- Subject-minded teachers find core curriculum frustrating.
- Teachers are not trained to plan and prepare materials.
- Colleges are turning out specialists in particular fields and the new teacher does not want to teach outside his major interest.
- Teachers are not prepared to teach core classes. They are merely teaching a group of children during a double period.
- Keeping up the original enthusiasm of a core teacher when she has been on the program for years.
- Fostering a spirit of security among teachers who have been successful under the traditional program of studies.

OTHER SCHOOL STAFF

Cooperation or support of other members of the faculty or school system	22
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Specific comments that are typical

- Recognition by the faculty that core is important and that work can best be accomplished in core programs.
- Our working philosophy is not entirely in harmony with core curriculum.
- Lack of encouragement from the central office.
- No definite program worked out by the central office. It is left to the school and no one in our school is qualified to head up such work.

PUPILS

Failure to become interested in project method; feel they may be missing something; or bored by long periods	13
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PUBLIC RELATIONS

Failure of parents or the public to understand or appreciate the core program	43
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Typical comments

- Selling the program to all members of the community.
- Hostile and indifferent attitudes of parents.
- Public demand for traditional education.

CURRICULUM AND TEACHING

Curriculum development: scope and sequence; problems of correlation between component parts; cutting across traditional lines; keeping subjects fused	35
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<i>Problems</i>	<i>Number of principals reporting</i>
Philosophy that will stimulate enrichment of the program	17
Maintaining standards in fundamentals in the face of more attractive enrichment	11
Developing techniques which permit and aid in use of real problems ...	11
Pupil-teacher planning, or teaching pupils to participate in planning ...	9
Developing units of work	4
<i>Typical comments</i>	
Preparation of resource units that will be suggestive to teachers who are less well prepared and imaginative.	
Teachers inclined to put greater stress on subject in which licensed to teach.	
Tendency to slide back to subject-matter lines.	
Failure of teachers to understand broadness of program and to think of child rather than subjects.	
Problems of what to teach.	
Extension of core curriculum to include broader fields of study.	
Providing opportunity for teachers to broaden their content fields and yet move the program along to a core rather than unified studies.	
Broad and thorough coverage of basic skills.	
Reading instruction with heterogeneous groups.	
Determining needs and interests of pupils.	
Making the core entirely functional.	
Developing methods to help youngsters learn to do group work.	
Danger of crystallization when program is published.	

MATERIALS AND EQUIPMENT

Lack of suitable furniture and equipment; insufficient space; physical set-up unsatisfactory; traditional classrooms	180
Lack of adequate instructional material	123
Inadequate library facilities	9

Typical comments

- Implementing the teachers with equipment and materials of instruction, i.e., visual aids, multiple texts, room libraries and conference-type furniture, files and storage shelving.
- Difficulty in finding current reference materials and teaching aids.
- Lack of resource materials on various reading levels, dealing with core problems, particularly material on low reading level but maturer interest level.

ADMINISTRATIVE ARRANGEMENTS

Lack of or insufficient teacher time for planning and preparation	64
Scheduling problems	55
Class size: Large classes, crowded conditions	48
Finances: Money to buy needed materials or to take trips; increased cost of per pupil instruction in core classes	18
Limitations implicit in small school	2

Problems

*Number of
principals
reporting*

Typical comments

- Funds for renting film, enlarging library, and for art material.
- Planning and carrying out regular group conferences of grade groups of core teachers in school hours.
- Insufficient time given to teachers for planning their work and for conferences with guidance department and parents.
- Working out problem-solving units on long-range planning basis.
- The technique of problem-solving is not recognized as the basic objective toward which the superintendent, school architect, principal, supervisor, and teacher are to direct the children.

EVALUATION

- Techniques of evaluation 25

Typical comments.

- Improving practice in reporting to parents.
- Developing more adequate methods of evaluating pupil growth.

COLLEGE AND HIGH-SCHOOL REQUIREMENTS

- College entrance requirements 5
- Requirements of high schools—mandated State syllabus 2

From the above it is clear that principals generally are faced with common major problems in furthering the development of their core programs. Problems of teacher preparation and adjustment account for one-third of the 1,048 separate problems reported. Inadequate facilities, equipment, and instructional material account for nearly another third. Next in order are problems of curriculum which make up 12.6 percent of the items reported and problems of scheduling core classes and conference periods so as to have core teachers of a grade free at the same time. Eleven percent of the items reported are of this latter nature.

Receiving fewer mentions are: class size (4.6 percent); failure to receive the support and cooperation of other members of the faculty or of the central office (2.1 percent); evaluation techniques (2.4 percent); insufficient funds to take care of additional cost of core instruction (1.7 percent); and lack of pupil interest. The last-named represents only 1.2 percent of the cases. College entrance requirements are considered important enough to be mentioned by only 5 high-school principals.

The pages which follow survey briefly some of these problems and offer suggestions which it is hoped will help principals and teachers who are facing them. Schools visited during the progress of this study were observed with a view to reporting upon the successes they have achieved in special aspects of the program, or solutions at which they have arrived for any frequently mentioned problem. The literature was also scanned for reports of promising practice. Suggested solutions, therefore, are based upon practices adopted in some schools which are moving forward with the core curriculum.

Pre-service

Preparation of Teachers

It is the rare teacher who has had pre-service preparation for core teaching. High-school principals cite the difficulty in obtaining properly or adequately prepared teachers as their number one problem. To the specific question, "Do you find the supply of well-prepared core teachers adequate to the further development in your school of an enriched core program?" only 15.6 percent of the 519 principals in the present study answered "Yes." The percentage of positive responses varied widely among the 5 States considered separately in this study. They range from 4 percent in New York to 40.7 percent in California.

When the responses of the group of California principals who are satisfied with the preparation of their new core teachers are related to the type of core program most frequently found in their schools there is found to be a perfect correlation with core types A and B. That is, in each of the schools represented in the 40.7 percent, type A or B is either the only type found or it is the type most often found, according to the principals' reports. Since these types represent only different degrees of correlation of prescribed subject matter, teaching techniques used may be similar to those for single-subject teaching. For example, one principal who checked type A but said that type B is the school's goal, remarks that "A teacher with a sound collegiate pattern in social science and in English is adequate." Another says, "We get teachers with a liberal arts background and adapt them to our needs."

Institutions Preparing for Core Teaching

Opinion varies widely as to whether any or all of the teacher-training institutions within a State prepare for core teaching. For example, in answer to the question, "What teacher-education institutions from which you draw teachers have programs especially designed for training core teachers?" 17 principals in Maryland said "None" and 26 others left the question blank, but 20 principals wrote "Maryland teachers colleges." The following table shows the extent to which

the 519 principals in the present study report they are able to obtain teachers especially trained for core work:

Table 4. — Percent of responses of 519 high-school principals to the question, "What teacher-education institutions from which you draw teachers have programs especially designed for training core teachers?"

State	Number of schools	"None"	Item left blank	One or more institutions named
1	2	3	4	5
United States.....	519	22.4	33.1	44.5
California.....	59	32.2	28.8	39.0
Maryland.....	121	14.0	21.5	64.5
Michigan.....	37	24.3	32.4	43.2
New York.....	50	40.0	38.0	22.0
Pennsylvania.....	41	22.0	31.7	46.3

A total of 88 different institutions of higher education were named by the 231 secondary school principals who responded positively to this item. Of these, 37 institutions received one mention only and 16 were mentioned by not more than two of the principals. Twenty-one institutions in all were named by as many as five principals:

- State Teachers College, Florence, Ala.
- University of California at Los Angeles.
- University of Southern California, Los Angeles.
- Florida State University Tallahassee.
- University of Florida, Gainesville.
- University of Illinois, Urbana.
- Northwestern University, Evanston, Ill.
- University of Maryland, College Park.
- Maryland State Teachers Colleges at Bowie, Frostburg, Salisbury, and Towson.
- Morgan State College, Baltimore, Md.
- Western Maryland College, Westminster.
- University of Michigan, Ann Arbor.
- Wayne University, Detroit, Mich.
- Western Michigan College of Education, Kalamazoo.
- University of Minnesota, Minneapolis.
- New York University, New York.
- Teachers College, Columbia University, New York.
- Temple University, Philadelphia, Pa.

Alberty²⁰ in a study made in 1949 found a marked effort among teacher-education institutions to break down departmental barriers. Recognition of the inadequacy of departmentalized study and especially the desire to eliminate it means, according to the author, that the first step is being taken toward core and core-teacher education. However, except for the trend toward unification in both subject-matter and professional courses he found little encouragement in the available data. Of 31 selected teacher-education institutions from which responses were received, 3 reported definite core teacher-education programs, 3 others reported that they offer special courses dealing with some aspect of the core curriculum, 13 that they provide for study of core in regular education courses. The remaining 12 said they were developing plans for improving the program for core teachers.

Practice Teaching in Public-School Core Classes

Many high schools which are most successful in the development of the core program serve as practice schools for teachers-in-training in the local institutions of higher education. Cadet teachers in these institutions then receive actual experience in core class instruction even though the work at the institutions in which they are enrolled is not directed to this type of teaching. Following graduation they may go into the local schools, but unfortunately quite frequently they go to schools in other cities or States which have not instituted a core program. This is especially true when the salary scale elsewhere is more attractive than the local one. In this way these people who have a working knowledge of core methods are lost to core teaching, until their new school affords the opportunity.

A few institutions which are known to utilize core classes of local high schools for practice teaching may be mentioned. Drury College in Springfield, Mo., uses Springfield Senior High School and Pipkin Junior High School of that city as its practice schools. Michigan State College at East Lansing sends its cadet teachers to East Lansing High School. Audubon Junior High School in Los Angeles, enrolling 1,500 pupils, reports that it is a training school for the University of Southern California; many of the 40 to 65 cadet teachers are doing their practice teaching in the school's type B and C core classes. Whittier Union High School which reports that it knows of no institutions which specifically train for core teaching, adds that universities recognize their need and send "potential" teacher candidates. All of Maryland's State teachers colleges are in a position to use local schools with core classes for practice teaching.

²⁰ Alberty, Harold, et al. *Preparing Core Teachers for the Secondary Schools*. Columbus, Ohio State University, 1949. 46 p. mimeo.

In Michigan, core teachers from all over the State meet together once a year for 2 or 3 days to discuss their work and their common problems. Representatives of the colleges meet with them. The colleges, especially those in the Michigan college-agreement plan, are taking seriously the problem posed by the principals, "How can we get teachers with core experience?" and are bending their efforts toward preparing teachers for core work. This is much more readily accomplished by colleges with no demonstration school of their own when in the community there is a high school which can be used as a training center.

Types of Programs Offered

Temple University

Temple University, in 1949, initiated an experimental "five-year program" to meet the demands of local schools for teachers trained for core teaching.²⁷ A selected group of students who have completed three years of college work are given special training for two more years. They fulfill certification requirements in two teaching fields, one of which must be English or social studies.

The heart of the program is found in five required core courses. The first of these, a course labeled "The Core Curriculum" involves visits to schools having the core curriculum, the determination of core themes, and the organization of teaching-learning materials relating to these themes. The second course is a semester of "Internship in Core Curriculum" in which the student spends the entire day as an assistant teacher in a junior high school which has a core program. For a full semester then he follows a daily schedule as nearly like that of a core teacher as possible. Pursued concurrently with his internship is a "Practicum in Core Curriculum," directed by the University supervisor "at which problems arising from the internship are shared and students and instructor work cooperatively to find solutions for the difficulties." The fourth course is a "Project in Core Curriculum," in which the student working on his own under the supervision of an instructor develops a project which has value to himself as a prospective core teacher and to other core teachers as well. The fifth course, "Group Development," provides "an opportunity for experiencing, observing, and practicing basic human-relations skills necessary in the achievement of a democratic group process," and is intended to give the students a solid basis for using group techniques in their own classrooms.

The experiment's spokesman points to several factors which he

²⁷ From an article by John M. Michelson, "An Experimental Program for Training Core Teachers," *School Review*, 69: 614-619, October 1961.

believes are contributing to the considerable success that has been achieved:

- (1) Only potentially successful students are permitted to enroll in the program.
- (2) There is a high degree of cooperation by the public-school people.
- (3) The core courses, particularly the internship, provide the type of experiences core teachers need.
- (4) The additional year provides additional professional maturity.

Maryland State Teachers Colleges

Each of the five State teachers colleges in Maryland has special programs for the preparation of teachers of general education in the junior high school. The curriculum is very similar to that for elementary teachers—general rather than specialized. Students have courses in art, English, mathematics, music appreciation, health and physical education, science, and social studies. Six to twenty-four hours of each are required. The principal difference, if not the only required one, between the preparation of elementary and junior high school teachers is the direction of professional courses in psychology and education to the adolescent level.

Teachers College, Columbia University

A master of arts program for the education of core teachers will be introduced at Teachers College in the fall of 1952. This will be a 40-point program which will include courses in group development and guidance, psychology of adolescence, mental hygiene, the American culture, core in junior and senior high schools, and student teaching in the core. The latter two courses will really constitute a "core" for the teacher-preparation program. Understandings developed in other aspects of the program will be applied here. For example, concepts of child development basic to the development of core will be used in terms of establishing the theory of core, as well as in understanding the problems of youth which confront students in their practice teaching. Special attention will be devoted to such areas of teaching as content, techniques, evaluation, materials for instruction, and scope and sequence.

The chairman of the department in which the new program will operate reports that the New York State Department of Education is approving the program on a 5-year experimental basis, and that systematic exploration of certification for core teachers is being carried on with other State departments throughout the United States.

Troy, Ala., State Teachers College

The State teachers colleges of Alabama were moving rapidly toward setting up a program for training teachers of core when the outbreak of the Second World War caused the curtailment of all ex-

perimentation. A plan had been worked out for providing a *general education core* in the first 2 years of college, followed by a *professional education core* in the second 2 years. Despite the difficulties of the war years, however, Troy State Teachers College has moved forward with development of the core areas of the freshman-sophomore general education program as well as with the development of the professional teacher-training program of the junior-senior years.

No separate department for training core teachers has been established at Troy, though the possibility for the future is not ruled out, according to a statement of the Director of Secondary Education.²⁸ The departments of English and Social Studies along with Education assume major responsibility for such training, but each department of the college feels a responsibility for pointing out that part of its subject matter which would naturally become a part of core in the high school.

In the general education courses of the first 2 years at Troy, the prospective core teacher actually experiences what a core program is like. Such courses, or core areas, include Bio-Social Development of the Individual, the Arts in Individual Development, Man and His Physical Environment, Regional and National Socio-Economic Problems, and Regional and National Developments of the Arts. During his junior and senior years his understandings of core curriculum and competencies in its processes are further increased through professional courses which take cognizance of the core and its development. Prospective core teachers then work as student teachers in the Troy High School which has operated under the core curriculum organization for a decade.

Leaders at Troy see few special competencies, outside of skill in the field of guidance and skill in the functional teaching of tool subjects, needed by the core teacher which are not needed by all teachers, according to the report by Dr. Harvill. They believe that "the idea that a core teacher must be some omniscient super-human has too long been a hindrance to the building of a sound pre-service program for the training of core teachers," but that "with even fair training almost any capable teacher can do acceptable core teaching."

A clear understanding of the great central objective of the core curriculum, the education for the democratic common life (citizenship), is emphasized as the first essential for successful core teaching. "The core is not that part of the total school program where some distraught teacher is engaged in aimless effort to 'fuse' or 'correlate'

²⁸ This section is based on an article by Harris Harvill, An Emerging Program for the Pre-service Training of Core Teaching. *Educational Leadership*, 9: 376-381. March 1942.

subject matter. The 'social-living' core is that limited part of the total school program where young American citizens, through tackling real personal or social problems of concern to themselves and to society, learn the democratic techniques and skills of cooperative problem solving and learn also the minimum essential subject matter necessary for successful life in twentieth century American democratic society. A clear understanding of this one central purpose of the core is absolutely essential to the successful core teacher." For this reason, at Troy the young preservice core teacher is told repeatedly that problems selected for study in the high-school core are to be real personal-social *problems*. He is told to forget the words 'fuse,' 'integrate' and 'correlate' as he attempts to conceive a high-school core program; instead he is urged to select real personal-social problems for study and to draw on any subject matter which will promote his aim of citizenship education.

Suggested content

"What should be the nature and content of a curriculum in teacher education designed to prepare secondary school teachers to participate in this type of program?" appeared on the inquiry form sent out by Moorhead State Teachers College, previously referred to.²⁹ Most commonly mentioned recommendations among the 195 responses were these:

1. Establishment of broad areas as majors and minors.
2. Increasing the number of majors and/or minors.
3. Expansion of the program of general education.
4. Increased emphasis in the professional sequences on:
 - a. Child and adolescent growth and development.
 - b. Unit procedure in teaching social and individual problems approach.
 - c. Secondary school curriculum reorganization.
 - d. Philosophical backgrounds of curriculum instruction and organization.
 - e. The guidance function of the teacher and the requisite skills.
 - f. Developmental evaluation rather than attainment of standards.
 - g. Increased opportunities for students to observe and participate in such a program as an aspect of their laboratory experience.

²⁹ Robbins, Clayton D. *Op. cit.*

In-Service Education of Teachers

A problem which looms large in the eyes of high-school principals, though not nearly so large as that of obtaining adequately prepared teachers, is the retraining of teachers they now have. Sixty-two principals reported that the need for constant in-service training, the lack of time, and the unavailability of qualified leadership for such training is a serious problem with them.

On the positive side, however, are principals' responses to the item "Is there an in-service training program for core teachers?" These responses reveal that a program of in-service education is typical in schools that use the core curriculum. The program may be brief, such as an institute of from 1 to 3 days usually preceding the opening of school in the fall; it may be a summer workshop or it may be a frequently or regularly scheduled feature of the school's on-going program. In many instances principals reported the use of more than one procedure.

Table 5. — Percentage of 519 schools providing in-service training programs for core teachers

State	Number of schools	Provide some in-service training	Kind of program provided			
			One-day institute	Summer workshop	Regular meetings ¹	Other ²
1	2	3	4	5	6	7
United States...	519	72.8	9.2	34.6	68.5	24.1
California.....	59	72.9	25.6	23.7	72.1	30.2
Maryland.....	121	83.5	7.9	49.5	68.3	18.8
Michigan.....	37	78.4	10.3	44.8	56.8	18.9
New York.....	58	70	2.9	2.9	77.1	31.4
Pennsylvania.....	41	61	12.0	28.0	68	16

¹ "A discussion or workshop group meeting at regular intervals throughout the school year."
² "Other" is usually explained as "two or three days before school starts," or "meetings called as needed."

Workshops and Courses

A discussion or workshop group meeting at regular intervals throughout the year is the most frequently used method for in-service education, according to questionnaire responses in the present study. These meetings are often in addition to a summer workshop provided for core teachers. In-service group meetings are usually scheduled or arranged by the high-school principal for the teachers of his school. They are frequently attended by the principal himself, the librarian, the curriculum coordinator, the counselor, and teachers whose work may be related to that of the core group.

Some schools, on the other hand, may participate in city-wide meetings. Rochester, N. Y., has monthly meetings of all core teachers in the city and biweekly meetings of coordinators of core classes. New York City Board of Education sponsors in-service programs for core teachers.³⁰ There are borough meetings every second week and meetings in alternate weeks for core chairmen. Core teachers are programmed so as to have the last period of the day free. They use this time plus an hour or two of their own time to work together for the better development of core instruction. In Los Angeles, there are several city-wide workshops from which teachers may select the one which fits their needs. A number of counties in Maryland have at one time or another scheduled courses in core teaching in which teachers may enroll if they wish. These courses may or may not afford college credit acceptable by one of the State institutions. Illustrative of these is that provided by Mrs. Fern Schneider, Supervisor in Montgomery County.

An in-service course in core teaching

Approximately 35 teachers of core classes in the junior high schools of Montgomery County, Md., met together on alternate Wednesday afternoons during the school year 1950-51. The high-school supervisor offered a course in core teaching for all who wished to attend. College credit was not provided, but credit toward renewal of the State certificate was allowed.

To start where all the teachers were was difficult since experience varied widely. Consequently, the supervisor made the assumption that each individual was new to the program. In this way each could be helped to fill in the gaps which were peculiar to him. The course, briefly outlined, was as follows:

³⁰ Suggestions to Teachers of Experimental Core Classes. New York, Board of Education, 1951. (Curriculum Bulletin No. 2.)

1. Definition of the core—theory of core and its place in the total program.
2. The learner in junior high school core—nature of early adolescence.
3. Content—choosing content to meet needs of pupils at the same time covering course of study material; skills and techniques in relation to content.
4. Method—planning with pupils, setting up problems, bringing in the various related subjects, organizing committees and group work, using special teachers in core, varying activities undertaken by groups.
5. Materials—choosing appropriate materials, using visual aids, making use of community resources.
6. Evaluation—pupil self-evaluation, group evaluations, unit evaluation, grades, tests, and re-planning.

It proved necessary to deal with content and method as one topic, and when this part of the program was reached the teacher-student class was divided into groups according to units or topics upon which they wished to work. Units chosen were those upon which pupils in their respective classes would soon be working. Unit topics are prescribed by the county courses of study. The particular problem, activities, and methods are left to teacher-pupil planning. This latitude, it is thought, gives opportunity to take care of group and individual pupil needs and interests.

The first task set for each of the teacher-student groups was to state a problem within the area selected upon which it wished to work. The problem must be interesting to children, child-worded, broad so that all children in the class would be able to contribute to its solution, and it must be close to the pupil. The supervisor believes that in core in order to assure pupil interest and understanding it is extremely important that pupils actually word their own problems.

All groups encountered difficulty in defining the problem, and without the supervisor-teacher would have bogged down. She pointed out that planning is difficult unless we have some common experience upon which we can draw, and at this point she gave all groups a pretest in distribution of the country's resources—its large cities, rivers, etc. This proved a successful device for starting discussion. Questions were asked by members of the group and these were listed as giving clues to pupils' problems. Related questions were grouped and arranged in order of importance. Then came the statement of the problem. Each individual in the group had an opportunity to word the problem as he saw it before the group decided on how it should be stated. The final wording had to be one that every individual in the group would accept.

The next step was to break down the large problem into sub-problems. Activities were suggested and chosen to solve the problems.

Each activity chosen for use whether by the whole class, committees, or individuals must contribute to the solution of the problem. The number of activities and their approximate length had to be decided in terms of the time and resources available.

The teachers representing the ninth-grade had the topic "trade." Finally, after much discussion the group arrived at this problem which seemed to meet the criteria: "How has trade changed our living conditions?"

Choosing activities—what are we going to do to solve our problem—involved gathering all suggestions possible and testing each to find out whether it would help solve the problem. The group had to consider the resources available for use, skills of individuals and of the group, levels of maturity of pupils, their past experiences, and interests. Two activities finally chosen were "Listing foods important in our living," and "Making a pictorial map showing the distribution of resources in the world."

Next, the group considered the skills and techniques needed in the activities in order to bring about the solution of the problem. The level of skills and techniques determines the quality of work. The skills of performing the activity when taken in their proper sequence make up the technique of carrying out the activity. The technique used is the one which best accomplishes what is to be done. For example, in listing foods, ninth-graders could be expected to alphabetize to the third letter; they would need to learn how to spell the words correctly; they could organize the list under appropriate headings. Map work gives opportunity for working cooperatively in committees as well as for organizing information.

Resources had to be chosen in their relation to the problem and to the activity and in relation to the ability of the users. They had to provide variety to meet various maturities, interests, needs, and a balance in experiences. Teacher-students were warned that scheduling classes for long periods does not make a core program; it is the experiences that pupils have in solving problems that count.

It was pointed out that in all of this planning and developing the teacher is an active guide. He goes from group to group, throwing a hint here, a suggestion there. He knows the standards of achievement of which groups and individuals are capable and leads pupils in formulating their criteria and goals. It is he who keeps activities within bounds and sees that they are always headed toward the solution of the problem. It is his responsibility to see that the pupil has a real learning situation and genuine satisfaction in the solution of his own problems.

This course attempted to do for teachers what was desired for

pupils in the "core"—setting up problems for themselves, seeking solutions by means of available resources regardless of formal subject-matter boundaries, learning through the experience of solving the problems, using needed skills and available resources, and evaluating in terms of their own classroom practices.

Teachers-college sectional meetings

In Maryland a series of sectional meetings are devoted to areas covered by the general education program. The meetings which were inspired by the State Department are attended by one of its representatives, the local State teachers college people, county supervisors in the counties in the college district, and possibly some of the teachers, depending upon the policy of the county. Outstanding specialists serve as consultants. The question posed to the leaders is: "What part does art (or music, or other area which is the subject of the conference) play in the education of everyone?"

The program of sectional meetings was begun in 1945 with child study. Language arts and music were the subjects in 1949-50. Fine and graphic arts were studied in 1951-52. Now the possibilities and uses of foreign language in the general education program are being explored with a view to their inclusion as a subject for study by the regional groups in 1952-53.

The purpose of the meetings is to develop in the teacher, through the supervisor, the know-how of instruction in the minimum essentials that all individuals should have in a general education program. The typical teacher of general education when confronted with the request that she include music in her program will say that she is not qualified. Therefore, experts in the areas studied teach supervisors and teachers the kinds of things about music that everyone should know. The philosophy back of the meetings is that the general education teacher should be one who has a minimum competency in all the arts, for it is through the arts that educational objectives are achieved: fine arts, physical arts, social arts, practical and technical arts.

City-wide organization to learn problem-solving techniques

"Problem-solving, a method of teaching and a technique of learning" was the title of a course offered to Minneapolis teachers in 1951-52. The prime purpose was to develop teachers' skill in the use of the problem-solving technique. A second major purpose was to break down the barriers which seem to be erected between core

and subject teachers, and thus promote better staff relations. It was hoped that this would be accomplished by bringing together teachers of English, social studies, and common learnings; establishing a community of interest based on the problem-solving techniques; and working together on the preparation of instructional materials. The premise was made that as a method of teaching, problem-solving is not the exclusive tool of core classes; it may very well be used in many subject-matter fields.

The course was organized in two parts. First, a group of teachers met together in six preliminary sessions to explore the content of the course. They studied together the following topics:

1. Problem-solving—its meaning and implications for teachers and students.
2. Basic principles of problem-solving.
3. Relation of problem-solving to the development and learning process of children.
4. The techniques of developing units.

To direct and coordinate plans for the course, a secondary school teacher was relieved from classroom duties for the year. Meetings were held in the afternoon, partly on school time and partly on nonschool time. Resource persons were leaders from the central office staff and the university.

This representative group, called the Orientation Group, was then broken up into teams of three members each to work as resource persons with interested teachers in the buildings where a desire for the study of problem-solving techniques was indicated by registration for the course. Besides the building meetings, three general meetings were planned of all teams and all course registrants.

Newsletters and Other Methods

Other methods of in-service education mentioned by high-school principals include provision of consultant services by a university; trained and experienced teachers released part time to work with new teachers on techniques, programs, and procedures; teacher-principal conferences; newsletters; and principal's bulletins. Several Maryland schools provide field trips into the community, county, and State to give their teachers a richer background of information for the units they will teach. One fruitful and stimulating source of help was mentioned by only a few high-school principals. This is school visitation. Neenah, Wis., reports that it combines school visiting with interschool conferences. In Cornwall, N.Y., visits to other "core" schools are followed by round-table discussion. School visiting, with the opportunity it gives teachers to observe the successes and weaknesses of other programs may be the source

of many suggestions of "do" and "don't" which teachers can carry back to their own classrooms.

Newsletters and principal's bulletins can give teachers much needed help. New York City has a very effective newsletter service for core teachers.

Newsletters from the central office

In addition to frequent meetings of core teachers in the high schools of New York City, a newsletter is sent by the coordinator of the program to each core teacher. Information on appropriate materials, helpful hints gleaned through class visitation, and notes on anything which a core teacher might be interested in knowing are included in these newsletters.

For example, the first newsletter of the 1951-52 school year included: (1) annotated list of books of fiction and nonfiction, which "slow learners would and did read," prepared by a core teacher; (2) helpful references for two units of work with comments about reading level, and an announcement of an "interesting series of broadcasts" from station WNYE with brief descriptions of the projected programs; (3) a "boardwork" report picked up by the supervisor on her visits among core classes which throws light on techniques teachers are using; (4) notes on committees and on group projects prepared by a teacher as a review for her class on committee purposes. It begins, "Ask Yourself" and ends with "Now—suppose you and your group analyze your own job!" (5) suggestions for using the school library with classes of slow learners, one core teacher's report of her experiences after 2 years of working with XG (experimental general) groups.

Newsletters include many brief items of interest. For example, one letter reports conferences with representatives of two museums who were interested in suggestions as to how the resources of their museums could contribute to the development of units of work. This same newsletter asked for a report on the topics of the units each core-class was working on so that "we may concentrate on materials which will be helpful to most of you." Another letter announced those topics which had been selected by groups of core teachers for discussion at succeeding meetings: (1) the problem of slow learners who come from elementary schools with requests for languages or stenography; (2) in heterogeneous groups, how to provide enough "meat" to keep the better pupils working to capacity and at the same time provide slower learners with appropriate activities and learning materials.

Scheduling to Provide Time for Planning

Closely akin to in-service education, and, in fact, a recognized part of it in schools in which the core curriculum has been established for some years, is core-teacher planning. Because of the nature of the core course, its lack of dependence upon the covering of prescribed textbook material, and the accenting of cooperative planning by teachers and pupils, many principals recognize the need for a greater amount of teacher preplanning than is required by the teacher whose work is guided by the course of study or textbook.

Recognition of the Need

Preplanning is essential even when scope and sequence of the core course are determined by the needs of the individual class situation, for these needs are never the superficial whims of children. The teacher must sense the underlying interests and needs and guide the group into real learning experiences. Since the experiences will be different for each class, the core teacher must give continuous thought and attention to their direction.

There are other aspects of core teaching which call for extra planning time both for individual planning and cooperative planning with other teachers. The guidance function of core requires that the teacher know his pupils and know certain techniques for counseling. Time for study of cumulative records is implied as well as time for work with the school counselor. The wide variety of activities in which core classes engage compels the core teacher to acquaint himself with a great deal of resource material, including the resources of the community itself. Teachers pooling their information and ideas are able to accomplish more than are teachers working alone.

Many principals recognize the need for providing time, but are not able to meet it. Sixty-four of them cite this as one of the major obstacles to the further development of their core programs. Scheduling problems and insufficient number of teachers, with the heavy teaching load this necessitates, often make it impracticable to allow

this extra time, they report. In actual practice, according to questionnaire returns, 73 of the 519 schools allow more time for planning by core teachers than by subject teachers. This leaves a sizable number of principals who do not provide such time or believe that it is essential to a good program.

One school reports that core teachers had double time when the program was originated; another school that the core teacher has an extra period the first year. An unfortunate concomitant here may be that core loses its flexibility and is expected to settle into a fixed pattern after teachers have acquired some knowledge of methods of core-class instruction. Some schools which provide no additional free periods attempt to relieve their core teachers of extra responsibilities such as for school-sponsored activities. Other schools reduce this load to a minimum.

Although there are some principals who feel that extra considerations given core teachers react unfavorably upon the morale of non-core teachers and so wish to avoid any semblance of "favoritism," other principals take the view that an extra period for core planning is a work period just as much as is teaching or responsibility for school activities, and schedule it as a work period for teachers. This is the practice followed at *Long Island City, N. Y., High School* where all core teachers, plus the general mathematics, general science, and art teachers who correlate their work as much as possible with core work, meet together during the first period each day. These teachers have four periods of teaching, one of conference, and one for their school building assignment.

Elizabeth, N. J., in a recent publication³¹ reported nine methods which its schools have devised for allowing time for planning:

1. The art program has been identified as part of the core so that either fewer or no separate art classes are required. The art teacher is thus free to work with core classes whenever he is needed.
2. Certain teachers who request it are relieved of attendance at some school functions, e.g., movies, auditorium programs, etc.
3. When an entire faculty is involved in preplanning, the children are dismissed for a half-day three or four times during the year.
4. In many schools it has been feasible to schedule classes so that either all or a substantial majority of core teachers are unassigned at the same hour and may use that time for core planning.
5. In larger schools a core curriculum department chairman undertakes to work out certain planning problems for and with other teachers. Usually some

³¹ Oveslew, Leon. *Making the Core Work*. Metropolitan School Study Council, 525 West 120th St., New York, 1951. p. 26-28.

extra unassigned time is provided for the building chairman for this and other functions.

6. A full-time core curriculum coordinator, attached to the central supervisory staff, channels planning materials and resource information to teachers throughout the city.
7. A part of many regular faculty meetings, or all of a few such meetings, are devoted to faculty planning for the core.
8. If a special problem involving a few teachers arises, substitutes are sometimes provided so that teachers may meet in all-day conferences.
9. To the foregoing may be added the informal meetings between teachers which occur during the course of the typical school day.

Methods of Scheduling

Scheduling classes so that all core teachers of a given grade will be free at the same time does present difficulties, but many high-school principals who are seriously interested in the success of the new program are designing schedules and making other administrative adjustments to facilitate its operation. Frequently it is necessary to increase the length of the school day. This can be done without serious detriment to the morale of pupils or teachers if it is emphasized that the additional time means less outside work for both. The extra time may be scheduled in one of several ways: There may be a half-hour conference period first thing in the morning for both teacher-teacher and teacher-pupil conferences with an extra half-hour at lunch time to be used as needed. Another way is to increase the number of periods in the school day. Still another is to lengthen existing periods to a full hour, each class meeting but four times a week.

Descriptions of ways in which four schools have worked out their scheduling problem to provide a conference period are included here.

Senior High School, Springfield, Me., uses a block schedule

Two variations of a type of block scheduling are used in Springfield Senior High School to facilitate the operation of the core program. Each block group consists of from three to six class sections that are organized in a manner which provides the same free period each day for the teachers of a given block. In some of these block groups, one teacher deals with two areas of instruction and a second teacher with a third area. In other blocks, each teacher is responsible for instruction in one area only and three teachers meet with the three class sections constituting a core group in three consecutive periods in which instruction is given in three different areas. Some

of the block groups in which one teacher is responsible for instruction in two areas and a second teacher in a third area include as many as six class sections. In the tenth grade the basic core is general education (English, history, and generalized science). In the eleventh grade the core usually consists of double period classes largely confined to language arts-social studies areas.

In all except a few cases the teachers of a given block have the same free period each day which is used in part for the planning of instructional activities of the block. The general education teachers are assigned two double-period classes each day, one period in which they supervise a study group largely made up of pupils from the core group taught by the teacher concerned, and the "conference" period. Typical utilization of the conference period includes teacher planning once a week, advisory activities with pupils two periods a week, and miscellaneous activities as the teacher desires for two periods. This schedule is subject to change, and at certain times during the year as many as three planning sessions per week may be held by a conference group which consists of the teachers assigned to a given block.

**Wm. A. Bass Junior High School, Atlanta, Ga.,
follows the little-school plan²²**

The little-school plan carries the block scheduling idea still further, in that it keeps together the same group of pupils for the entire day with the same teachers. It has possibilities for the principal of the large junior high school whether he is interested in developing a true core program or simply in the unification of subjects. At Bass High School the grade 8 program is departmentalized, but it is cooperatively planned, carried out, and evaluated. Community Citizenship is the theme for the year. The staff plan their work together in their in-school-time conference period under the leadership of the social-science teacher.

As it has been developed at Bass, each little school enrolls approximately 160 pupils who are assigned to four or five sections. Each little school has its own staff; develops, within the framework of the curriculum, its own program; plans its own assemblies, parties, and parents meetings. Certain subjects, such as art, music, and physical education are taught by teachers who serve the whole school. When these teachers are with the pupils of one of the little schools,

²² *The Little School* by W. Joe Scott, et al. Atlanta, Ga., Wm. A. Bass High School, 1950. 16 p.

the staff members of that school have opportunity to meet together to discuss common problems, to discover common objectives, to plan programs, and to evaluate progress.

Each little-school staff has at least two conference periods per week in school time. The conference may be staff alone, staff and one pupil, or staff and a small group of pupils. Once a month during the conference period the staff and parents come together for informal discussion of their problems and plans.

Daniel Webster High School, Tulsa, Okla., has a floating period.

"The school is an institution in which pupils experience democracy in action," is the major precept at Daniel Webster. No bells are rung in the school to mark the beginning or end of the five 70-minute periods. The cafeteria is open all day long. Pupils may go in for a bottle of milk or snack any time they wish in the 5 minutes between classes. There is very little tardiness as a result of this privilege. The atmosphere of the school provides the right setting for democracy in the classroom, an essential feature of core.

The school has a floating-period type of schedule. There are six periods scheduled, but only five of them meet in any one day. Each class, therefore, meets but four times a week, but every class, including orchestra and chorus, meets four periods. The one isolated or completely free period is available for assemblies. Study halls, considered a waste of time, were eliminated altogether. As a result, every pupil carries 6 subjects and can graduate with 24 units.

The school has a unified English-social studies-science program in the ninth grade, English-social studies in the tenth, no core-type program in the eleventh, and a single-period core in the twelfth. It is only in the twelfth grade that the principal considers a true core is functioning. Teachers volunteer for core teaching. The principal makes an effort to get teachers who are sold on the group process and want to use it. Whenever possible he selects new core teachers fresh from college and gives them in-service training in core methods before they become settled in other ways of teaching.

Teachers of each grade have a planning period every day in which they agree on areas to be covered and methods of procedure, study individual pupils, explore materials, and make adjustments on schedules. Each grade has a class sponsor whose function is to act as chairman of the planning period, to expedite total class activities, and to serve in a guidance relationship.

The current schedule for teachers of the basic subjects who are responsible for the unified studies or core-type program in the ninth grade looks like this (disregarding the floating period):

Schedule for ninth-grade teachers of basic subjects, 1951-52

Period	Teacher A	Teacher B	Teacher C	Teacher D	Teacher E
I.....	{ English.....	{ English.....	{ English.....	Science.....	Physics.
II.....	{ Soc. St.....	{ Soc. St.....	{ Soc. St.....	Science.....	Science.
III.....	{ Soc. St.....	{ English.....	{ Freshman } { Sponsor }	Science.....	Core.
IV.....	{ English.....	{ Soc. St.....	{ English.....	Science.....	Science.
V.....	PLANNING PERIOD				Chemistry.
VI.....	Soc. St.....	English.....	{ Soc. St.....	Athletics.....	Science.

Teacher E spends only part time with ninth-grade pupils. Like other teachers who are not scheduled for basic-subject teaching, Teacher E has a teaching load of five classes each day. All teachers have a period from 8-8:40 each morning for faculty conferences and organization meetings. The school day for all teachers is 8 a.m. to 3:30 p.m., with one-half hour for lunch. English-social studies teachers have 3 groups of approximately 35 pupils each to know, while single-period subject teachers must know 6 groups.

West Junior High School, Kansas City, Mo., added a seventh period³³

"Education for *All American Youth*" was the inspiration for the common learnings program instituted at West Junior High School in Kansas City, Mo., in 1943. It was frankly experimental and was undertaken by two seventh-grade teachers and the principal. During the year the other two seventh-grade teachers of basic subjects became interested and asked to have the program in their classes. By the beginning of the third year of experimentation teachers of English and social studies in the eighth and ninth grades had become interested and volunteered to try the program.

During the first 2 years of experimentation in the seventh grade common learnings included arithmetic and met for 3 periods a day. Homeroom was not included. Before the introduction of the new program in the eighth and ninth grades in September 1945, it was realized that some drastic changes in schedule needed to be made.

1. The school day was lengthened from 6 to 7 55-minute periods, 2½ of which were allotted to common learnings. Arithmetic was taken out of the common learnings, the extra half period being allowed for guidance. Ten minutes additional time was added to the first period to provide for the routines of homeroom which it had absorbed.

2. Each teacher of common learnings was assigned 2 classes a day for a total of 5 periods. One period was for lunch and individual needs. The remaining period was for planning.

³³ For a more detailed discussion of the program, see "Common-Learnings Program in the Junior High School," by Rosses V. Cramer. *Bulletin of the National Association of Secondary-School Principals*, 35: 150-166, April 1951.

3. All common learnings teachers in a grade were given the same period free each day. They meet together about twice a week to plan for the showing of films, taking trips, and anything else they are doing that is similar. Every 2 or 3 weeks the principal and counselor meet with each grade group to provide supervisory help with planning and with common problems. The presidents of each core group also attend these meetings.

The program of studies for the 6 groups in the eighth grade shows that the three common learnings teachers are not assigned a group the fourth period:

Program of studies for eighth grade, 1951-52

Period	Group A	Group B	Group C	Group D	Group E	Group F
I....	C.L.....	C.L.....	C.L.....	H.M..... Ind. A.....	H.M..... Ind. A.....	H.M..... Ind. A.....
II....	C.L.....	C.L.....	C.L.....			
III....	C.L..... Lunch.....	C.L..... Lunch.....	C.L..... Lunch.....	Speech.....	Arith.....	Arith.....
IV....						
V....	H.M..... Ind. A.....	H.M..... Ind. A.....	H.M..... Ind. A.....	Lunch..... C.L.....	Lunch..... C.L.....	Lunch..... C.L.....
VI....						
VII....	Speech.....	Arith.....	Band.....	C.L.....	C.L.....	C.L.....

NOTE: Groups A, B, and D have speech first semester and the choice of art or music second semester. Groups E and F have the choice of art or music first semester and speech second semester. Group C elected band and has it for both semesters.

Similar programs are in effect in the seventh and ninth grades. In the latter grade, of course, provision is made for more electives, but common learnings, which in this grade replaces English and civics, meets for the same 2½ periods and common learnings teachers have the same period free for grade-level planning. Common learnings teachers thus have a total of 70 pupils for whose progress and well-being they have the major responsibility. This gives them a great advantage over other teachers who have their pupils for a single period and must meet 175 different pupils each day.

Materials and Equipment

For school administrators, materials and equipment loom large as problems. Lack of sufficient space, suitable furniture, and equipment, is listed as a major problem by 180 of the 519 principals returning the questionnaire; lack of adequate instructional materials is mentioned by 123 of them.

Classroom Environment

The processes of planning together and working in groups, integral features of core, are handicapped by classrooms with fixed furniture and insufficient work space, not to mention the depressive effect of drab and uninteresting surroundings found in some schools. These handicaps may present a challenge to the competent experienced core teacher, but to the inexperienced teacher they represent real problems.

What is the ideal classroom for core teaching? So far as is known, no one has come forth with the answer. Smith, Stanley, and Shores²⁴ make the following suggestions:

Buildings, grounds, and classrooms should be large and flexible enough to permit pursuance of a wide latitude of group activities. Buildings and classrooms to house a core curriculum would follow the general pattern of those required for an activity curriculum. In both the activity and the core curricula, breadth and diversity of activities is the rule. The rooms must lend themselves to whatever problem is studied. Furniture should be strong, light, and easily movable. There should be few built-in features, since these tend to limit the flexibility of a room.

A single blackboard across one end of the room is probably ample. A large workbench and a sink-type lavatory are almost essential. Floor space must be much more ample than in the conventional classroom; for the core curriculum requires work rooms or laboratories for problem solving, and the size and arrangements of these rooms must broaden rather than restrict the scope of the possibilities for learning.

The same general principles apply to the building as a whole. It, too, must encourage the varied program envisioned by the core curriculum. Corridors should be large and well-lighted and should provide ample space to be decorated by student groups or to display student work and other objects of general

²⁴ Smith, Stanley, and Shores. *Op. cit.*, p. 498.

interest. General-purpose rooms should be centrally located and otherwise easily accessible. It should be possible to pass outdoors from every room with a minimum of disturbance to the work of other rooms, for the core program uses the classroom only as central headquarters and workshop.

As part of his description of selected core programs in Alabama, Harvill³⁵ pictured the setting of each program. The learning environment of a twelfth-grade class at *Lexington High School*, as he describes it, is in many respects typical of that found in many schools in which adaptations have been made for core teaching.

The core classroom is a large room. Bookcases with "over five hundred" books line the side walls. Individual lockers for pupil use are built into the back walls. A magazine rack holds current issues of a number of the more popular periodicals. Large boxes of growing plants are at the windows; cut flowers are on the teacher's desk. The walls of the room are a pastel color; the ceiling is a still lighter color. The room was painted by the students. A typewriter on a movable stand is near one wall; a dictionary is on a stand. Tables and chairs take the place of desks. Near the magazine rack are a glider, two comfortable chairs, and two card tables on which magazines lie. A radio is on a table; framed pictures are on the walls; a bulletin board covers one wall. Art materials and some science equipment are visible in glassed-in cabinets. Colorful draperies are at the windows.

Displayed in the core classroom were large aluminum trays, hammered out and decorated by core students. The teacher said, "We made about one hundred of these for Christmas gifts." Plates and glasses decorated with various designs (some etched by acid) were on display. Members of the core class had stenciled designs on cloth as part of their art activities.

In addition to the many magazines and books already mentioned, the core class has access to many sources of information. The school library is much above the average for a small school. A fee of \$4, charged each student, has over the years built up a good collection of teaching materials. A record player and many albums of records are in the school library. Films add worth-while information.

Class Projects To Improve Environment

It is not unusual for a core class with a discouraging-appearing classroom to undertake a class project to brighten the room. Walls are painted a cheerful pastel; growing plants are brought in; cut

³⁵ Harvill, Harris. *Development of the Core Curriculum in Alabama Secondary Schools*. *Op. cit.*

flowers are furnished in season; and colorful cloth or paper drapes are hung. One group which had no bookcases made its own from apple boxes and painted them in keeping with the room. Posters on the walls and a string of colorful scrap-books made by pupils as part of the work of a unit, add interest.

A senior core class in Uriah, Ala., High School studies "paints"³⁰

Launching the core unit.—A core unit on "Paints" was initiated because, as pupils put it, "the room looked awful." An elementary teacher had previously painted her classroom; the seniors were inspired to do likewise. The county superintendent agreed to supply the paint.

In launching the core unit, the class divided into self-appointed committees, each to do a definite job which the class had decided necessary to the success of the class project. One committee was to learn how to remove old paint from woodwork and to remove such paint. One committee was to build scaffolds; one committee was to build bookshelves; one committee was to build flower boxes; another to resurface the blackboards; and another to choose colors for the room (with the advice of experts) and report to the class.

Activities.—Much research was done on "history of paints," "kinds of paints," "best paints for certain purposes," "prices of paints," etc. The class learned to take care of paint brushes by washing and hanging them on a specially prepared rack. A study was made on "kinds of brushes best to buy." Written compositions were handed in as a result of research done. The class also studied how to mix paints.

Lighting and color were studied by the class. A sun-tone yellow was chosen for ceiling and back wall; everything else was to be an "eye-rest green." Panel discussions were held on painting in industry and in color in the home. Much sharing was done through oral reports. The agriculture teacher and a neighborhood painter were interviewed. A large map of the world was constructed showing the sources of paint ingredients. Filmstrips on "Color" were viewed. A nearby tung orchard was visited as the class studied paint thinners. Some members of the class enjoyed experimenting with tempera colors and wax crayon. Several attractive drawings were produced showing medieval costumes, knights in a tournament.

As a result of this study on "Paints" several rooms in homes of class members have been painted; color schemes in several homes have been improved. In a community meeting, as plans for a new

³⁰ 1944.

school building were being discussed, several Senior III core students made excellent suggestions about color (as reported by the county supervisor).

Sources of information.—Reading materials used in this study included encyclopedia, color charts, magazines, chemistry books, general science books, catalogs from mail order houses. Government pamphlets were used extensively; geography books provided maps showing sources of paint ingredients. Filmstrips gave valuable data; interviews were a source of information.

Related subjects.—English literature was taught concurrently (and periodically) with the unit on Paints. The teacher made no great effort to correlate two such divergent studies. Science was drawn on heavily for understandings necessary for success of the class study of Paints. Communication skills were practiced as pupils gathered information and shared it through panels and reports. Mathematics made a definite contribution to the success of the core project. Understandings in art were required; skills in the field of art were practiced.

Instructional Materials

Core fees

Many schools charge a core fee. In schools visited, fees ranged from 50 cents to \$6 a semester. In States which do not provide free textbooks for secondary school pupils the fee takes the place of a book which would otherwise have to be bought. When public moneys are not available for instructional materials core fees do make it possible to enrich the program materially. On the other hand, the cash outlay for pupils whose parents are in the lower income groups might well prohibit them from enrolling in core programs in those schools in which there is a choice between core and noncore.

Classroom libraries

Whatever the source of funds, it is possible in the core classroom to have a wider selection of books than in the traditional class which requires each pupil to have a copy of the same text. In the core class several copies of each of two or more basic texts and reference books may be purchased, with two or three copies each of other books that are considered useful for reference purposes. Copies of current periodicals are a popular feature of core classroom libraries. The number of these for which subscriptions can be ordered depends

again, of course, upon the available funds. Oftentimes one or more pupils bring in the issues of a periodical as soon as their families have read them.

Searching for pertinent materials is an essential feature of the development of the core unit. Much of the material brought in and contributed by pupils can become a part of the classroom library. A committee of pupil volunteers can be assigned the responsibility for classifying materials and may, if desired, start a card catalog and record materials borrowed by pupils.

Curriculum libraries

Junior high schools in Springfield, Mo., have curriculum libraries with a curriculum assistant in charge. The curriculum assistant teaches one core class and devotes the rest of the time to the curriculum library. At *Jarrett Junior High*, for instance, there is a sizable curriculum library arranged under topics which in the past have been the subject of units of core study. When a new unit is to be undertaken teachers borrow all the books, papers, and clipping files relating to the unit. Topics include transportation, safety, minority groups, health, various countries, recreation in Springfield, vocations, careers, manners, and morals. Twice a week in their conference period core teachers meet with the curriculum assistant to select materials. Admittedly the scope of the materials available tends to limit the scope of the units that may be undertaken.

The school library

The school library takes on new interest and a new responsibility when a core program becomes a part of the curriculum. Groups of pupils and committees will consult the librarian at frequent intervals requesting information relating to various aspects of the problem unit. In order to be prepared, she will want to work closely with core teachers, preferably in their planning sessions. Wherever possible she should be a regular member of these sessions.

The librarian at *Kinloch Park Junior High School*, Miami, Fla., reports that introduction of the core in that school increased attendance for reference work at least threefold, and that only the seating capacity of the library prevented a larger increase.³⁷ "The librarian's load in respect to individual guidance in reference work is increased, but the results justify the effort. Pupils develop into better leaders and followers and, in a properly handled program, every pupil has a chance to work as both. . . . The greatest change observable in the

³⁷ Steiner, Dora. What Is Expected of the School Library When a Basic Education Program Is Introduced? *Library Journal*, 76: 1876-1877, Nov. 15, 1951.

library is that the pupils no longer work under pressure to finish assignments before the next bell rings; they need pay no attention to the regular bell schedule and therefore do better work. The committees working together in the library must necessarily talk together breaking the traditional dead silence of a library; but the busy hum of voices, which can be kept under control, is an indication that work is being done."

Non-reading materials

A core program makes extensive use of visual aids as well as of the printed word. Films and filmstrips and opaque projections are in frequent use in some schools. Pictures, posters, maps, slides, charts, models, and displays have much to contribute when wisely chosen. Arts and crafts materials are recognized media for problem solving in some core programs and are a part of the core class equipment.

To make it relatively easy for core teachers to acquire the materials they need, Harford County, Md., which has no required textbooks or other instructional materials, orders materials on requisitions made up by individual teachers.³⁸ Teachers are free to requisition materials at any time, as new needs develop, thus supplementing the initial orders which are made annually on the basis of anticipated needs. "The only criterion for determining what is a valid material of instruction is the contribution which it can make to the accomplishment of a worthy aim." One requisition requested such different items as dictionaries, outline maps, embroidery cotton, and cement. Teachers are informed of new materials of instruction through (a) easy access to samples of new books, visual aids, etc.; (b) bibliographies of materials in various areas; (c) the sharing of experiences through bulletins, meetings, cumulative unit reports, etc.

³⁸ A Core Program Grows, by Dorothy Mudd. Bel Air, Md., Board of Education of Harford County, 1949. See pages 19-74 for comprehensive suggestions relating to the use of materials and resources.

Planning of Areas and Activities

Although the core curriculum departs from the concept of subject matter organized in logical sequence, most writers in the field are sympathetic to the idea of predetermined problem areas or areas of experience for each of the years in the school, arranged in a sequence corresponding to the needs of youth at the grade level. Practice varies, but more schools have predetermined problem areas than do not. (See Table 1.) The areas may be determined on a city-wide or county-wide basis, or they may be determined by the teachers of an individual school.

Developing and Using Resource Units

Following the introduction of the core in Maryland schools, teachers met together in summer workshops on a county-wide basis to agree upon areas of need and to develop resource units within those areas. Usually teachers met again in the following summer to refine these resource units in the light of their experiences during the school year, and to prepare additional units.

Talbot County, Md., teachers select problem areas

The procedure in the 1950 Talbot County workshop was (1) to identify those problems which teachers felt were significant and meaningful to their junior high school pupils; (2) to group the problems into areas for unit construction; (3) to allocate those unit areas according to grade level; (4) to work out one unit for each of the grade levels in the junior high school.⁸⁹ Participants meeting in their respective groups listed a total of 55 problems which they believed are significant to junior high school pupils. These problems were classified into problem areas and arranged by grade levels. Problems listed for the seventh grade are:

Orientation.

Living in Talbot County.

Worthy use of leisure time.

Living in the home.

Safety is everybody's business.

Conservation (forest and wildlife).

Expressing ourselves effectively.

"Living in Talbot County" was chosen for development at this first

⁸⁹English-Social Studies Program in the Junior High School. Part I. Talbot County, Md., Public Schools, 1950. 80 p. (mimeo.)

workshop. Six major objectives were defined and suggestive questions pertaining to the area, some learning activities, and some resources and materials were listed for each objective. These were followed by a list of general resources applicable to several or all of the major purposes, skills to be developed, and suggestions for evaluation. In the 1951 workshop additional units were prepared.

In reporting upon the outcome of the first workshop, the high-school supervisor emphasized that the material presented was not to be considered *the* curriculum or *the* activities, but that an imaginative teacher would want to vary and add to these activities.

Basic Living teachers in Battle Creek plan resource units

When Basic Living, a class replacing biology and social studies in the tenth grade, was instituted at Battle Creek Senior High School in 1947, a teacher's guide for the course was worked out by teachers and consultants in a summer workshop. According to a statement in a report of progress 1946-49,⁴⁰ "Its preparation served to bring the group closer together and was of aid in developing insights regarding the nature of the project." It was used very little "once the class-work got underway. The value of the guide was in its preparation."

Certain areas, however, did become more or less stabilized. Such were Orientation, Human Growth and Development, Boy-Girl Relations, Intergroup Relations, and Family Relations. Within these areas and within others in which interest might develop, specific problems of most significance to the group were discovered and methods of solving them were planned by the class.

In the spring of 1951, Basic Living at Senior High, along with the core in junior high schools, came under consideration for redirection. Basic Living had been required of all sophomores; now it would be elective. Resource units would be provided. Accordingly all Basic Living teachers in their daily planning period, drew upon their several years of experience with the program to develop resource units. Three areas were agreed upon with several units planned in each area. There would be one, two, or three required units; others would be elective.

Area	Units
Understanding ourselves	*Physical growth and development.
	*Common diseases.
	Health and safety in an atomic age.
	*Psychological growth and development.
	*Our potentialities.
	Vocational choice:
	Getting a job.

⁴⁰ Cooperative Research and Curriculum Improvement. *Teachers College Record*, 51: 410-472, April 1950.

- Understanding others *Family relations.
 *Getting along with others.
 Dating problems.
 Selecting a mate.
- Social problems *Current problems.
 Juvenile delinquency.
 State institutions.
 Consumer goods.
 Handling finances.
 Intercultural relations.
 Labor-management.

*Required units.

In general, it was decided to use the following headings in preparing each unit:

- Characteristics of adolescents to which the unit is suited.
- Suggestions for launching and motivating the unit.
- Pupil problems.
- Teacher objectives.
- Pupil objectives.
- Activities which may be used in the solution of problems: reports, debates, dramatizations, field trips, group work, art work, demonstrations, etc.
- Materials, including teacher background materials, pupil-basic and pupil-diversified references, audio-visual aids, etc.
- Culminating activities.

These topics are suggestive of those around which resource units are usually developed. There is no exact pattern, however. Other topics oftentimes included are skills reinforced or introduced during the unit, and evaluating activities.

Advantages and disadvantages of resource units

The resource unit, whether prescribed or elective, bolsters the teachers' sense of security that may have been undermined with the removal of prescribed textbooks and courses of study. The resource unit is not a directive to be followed slavishly, however; but it serves as a guide for the development of the teaching unit. Krug defines it as "a collection of suggested learning activities and materials organized around a given topic to be used as a basis for a teacher's preplanning."⁴¹ Albery calls it "a systematic and comprehensive survey, analysis and organization of the possible resources (e.g. problems, issues, activities, bibliographies, etc.) which a teacher might utilize in planning, developing, and evaluating a learning unit."⁴²

⁴¹ Krug, *op. cit.*, p. 160. For a discussion of the relationship of resource units and teaching units, see p. 159-163.

⁴² Albery, Harold A. *Reorganizing the High-School Curriculum*. New York, Macmillan Co., 1947, p. 250.

The resource unit is usually developed by a group of teachers and thus is a learning situation for those participating. It is intended for teacher, not pupil, use. Some schools which moved directly from traditional subject classes to completely teacher-pupil planned core units have found it expedient over the years to have teachers write down their experiences with recurring units and eventually, working cooperatively, to compile these experiences and to issue them as resource units at specific grade levels for future use of the teachers of those grades.

The practice has certain advantages as well as disadvantages. It does give new teachers a sense of security; at the same time there is the danger that in spite of all warnings teachers will treat the units as a course of study. It provides a certain scope and continuity of effort in core and thus assures that no group will miss some important instruction and that no group will repeat a unit in a succeeding grade; at the same time the risk that core will crystallize into a formalized pattern of instruction is involved. Writing the units provides a learning situation for teachers participating. Completion of the units, however, may leave teachers with a sense of accomplishment, as well as with the feeling that problems are solved and the need for the continuance of cooperative planning among them is over; teaching methods of those who did not participate in their development may not be affected by the completed document which is handed them.

Springfield, Mo., schools move both to and from resource units

Experiences of two schools in Springfield, Mo., illustrate growth in divergent ways in the use of resource units in core curriculum development. In the early years of the general education (core) program at *Springfield Senior High School*, there were no resource units or guides available. As teachers worked with pupils and found the same problems recurring year after year, they felt it would be helpful to them to write up certain of the units that had been worked out in the classrooms. This information would provide a guide for training new teachers, at the same time answering the beginning teacher's oft-asked question, "But what do I teach?" These teachers—from the departments of language arts, social studies, and science—working together over a period of several years produced a mimeographed document, of some 30 resource units for the tenth, eleventh, and twelfth grades.⁴³

Suggestions for use of the resource units are printed at the be-

⁴³ Resource Units for the Life Adjustment Education Program. Springfield, Mo., Senior High School, 1960. 236 p. (mimeo.)

ginning of the book. They take into account the dangers inherent in their use, as pointed out above, and thus serve as a warning to teachers of the need for flexibility and for continuous study.

1. These units have been prepared to serve as a guide for the teacher. They should not be considered as a course of study to be followed in every respect.
2. The operating concepts listed in each of the units are used to represent generalizations and ideas which have social significance. The concepts are not to be presented to the pupils as statements of fact to be learned. . . .
3. The objectives are stated in terms of behavior patterns, on the theory that the purpose of education is to direct and redirect pupil behavior. . . .
4. The problems for study and research are not intended to limit the teacher or class. During the pupil-teacher planning periods, many more important problems will be suggested.
5. The learning activities included in each unit are definite and varied. The teacher is free to use all, or to use none if he and the class can select more effective experiences.
6. The purpose of the evaluation activities is to provide a method for estimating the success of the resource unit.
7. The bibliography . . . is never to be considered a complete list. It is the responsibility of each teacher to be constantly on the alert for new materials—varied sufficiently to meet the needs and interests of the pupils.
8. The resource units should be studied and enlarged upon by the teachers in their conference groups, providing the additional activities point directly to the stated objectives.

More units are provided than can possibly be used and teachers and pupils together select the ones they wish to study. In many instances a unit in progress spontaneously arouses pupil interest in a problem which is the topic of another unit included in the resource guide. This is quite natural, of course, since the units included are those that developed spontaneously with similar classes before the units were written.

Each resource unit contains suggestions for many different types of activities. The teacher of one eleventh-grade class introduced the unit on the Family in American Life by having pupils write a theme about some characteristic of their parents which aroused their interest in the home situation. Another class began its thinking on this subject with the reading of the Life Adjustment Booklet on "How To Live With Parents." In another, interest was aroused through showing the films, "The Family on Trial" and "Is Your Home Fun?"

Pupils of each class chose from among the 16 different activities suggested in the resource unit those that most appealed to them. For example, one class divided itself into five groups. One group inter-

viewed a number of families to find out what family traditions or customs they maintained. Another group made a survey of the class to discover how many had older people in the home besides their parents and whether the old people were in good health, independent, and had any hobby. After the group gave its report, each member of the class wrote on what kind of old age he or she would like to have. Another group debated the issue, "Resolved: That there are more opportunities for developing an ideal American family in the city than in the rural areas." Still another worked on family troubles and their solutions as recorded in literature. One story was dramatized. The fifth group had a round-table discussion comparing family life today with life of 50 years ago. Considerable research was required for this. One pupil acted as leader and gave the class a chance to take part in the discussion. In the course of developing such a unit, burning issues oftentimes are discovered, such as what to do with older brothers and sisters, and what should be the attitude about the family car. These issues must, of course, be dealt with and time is allowed for them.

Pipkin Junior High School, in Springfield, has arrived at a different conclusion with regard to the provision of resource units. In a curriculum reorganization movement starting in 1948 it was decided to discontinue the preparation of resource units as a way of planning because of the feeling that problem areas should evolve as the teacher works with his group of students rather than be preplanned by teachers. Teacher planning was not to be eliminated, but was to be redirected toward the discovery of techniques to be used in order to find pupil interests, needs, and concerns.

The techniques used to determine needs included an inventory of pupil needs as teachers recognized them, a series of parent-study groups to discover what parents considered needs to be, and a questionnaire to all sixth-graders in the school district to discover needs as pupils saw them. Needs seemed to fall under three broad headings—personal, social, and environmental—and were listed in these categories.

After the needs list was developed, a group of six teachers was given the responsibility for developing a curriculum for seventh-graders which would provide ways for these needs to be met. In order to achieve maximum flexibility a 5-period block of time was set aside for general education. Special resource teachers are responsible for the art, music, and crafts or homemaking. The children are scheduled for one of the three classes for 1 period each day on a 12 weeks' rotation, thus making it possible for every general education teacher to have a daily conference period.

General education classes draw freely from the conventional subject areas of mathematics, science, social studies, and language arts for information and skills relating to the social, personal, and environmental problems considered. Physical education experiences also come during this time. Classes of the same grade level are grouped in the same part of the building so that teachers may exchange groups for certain activities to take advantage of each other's competencies, if at any time they wish to do that.

It was decided that most of the planning of classroom activities should be done by a teacher with his group of pupils. One resource unit, that of orientation of new seventh-graders to the school, was preplanned by a group of teachers in a summer workshop. All other units of study develop as a result of pupil-teacher planning.⁴⁴ The orientation unit provides the opportunity for becoming acquainted with each other and for discovering many common problems and concerns.

Working Without Resource Units

Gillespie Junior High School keeps a chart of units which classes choose

Gillespie Junior High School in Philadelphia has a core program which functions on a basis similar to that of Pipkin. Gertrude Noar, former principal of the school, says that learning experiences within the core program "can best be accomplished if they are planned and developed by the teacher and pupils on the basis of pressing and immediate common concerns which constantly arise within every area of the child's life. Inasmuch as there is no way of predetermining such problems and questions, there can be no artificial determination of grade themes or even of sequences within any one term's work. Sequence becomes a matter of relevance."⁴⁵ She believes that pupils and teachers can determine the next job to be done if they discuss with sincerity and answer honestly the three questions: "What have we done? What is there still to be done? In the light of the strength and weakness of past performance, and of our present position on the road to becoming intelligent citizens, what must we do next?" To avoid "dangerous omission" and "wasteful repetition," the teacher must keep a record of each day's accomplishments, and, upon the completion of the unit, file this with the principal or supervisor. A chart in the principal's office will record the units studied by each class of each grade.

Under this system a class in each of several of the 6 semesters in junior high school might be found to be studying the same unit. For

⁴⁴ *Casebook in General Education Planning*. Springfield, Mo., Pipkin Junior High School, 1961. 87 p. (mimeo.)

⁴⁵ Noar, Gertrude. *Freedom To Live and Learn*. Philadelphia, Pa., Franklin Publishing Company, 1948. p. 13.

example, at the end of the first report period of the fall of 1951, the chart revealed that one class at least in each of grades 7B, 8A, 8B, and 9A had just completed a unit on "Pennsylvania" and one class in 7B, 8A, and 8B had worked on "Astronomy." Theoretically this is no problem because earlier charts would have indicated that these classes had not undertaken the unit previously and the current chart would prevent their repeating it in a later grade. The weakness is, of course, that not only do pupils transfer between schools, but pupils staying in the school do not always remain through high school with the same class. Miss Noar believes, however, that if an area is repeated, "The very nature of the growth process as well as the fact that no subject, question, or problem is likely to be completely explored, answered, or solved at any school level, will insure the 'covering of new ground,' rather than the retracing of former footsteps."⁴⁶

Introducing Teacher-Pupil Planning

Teacher-pupil planning is an essential feature of core-class instruction. This is true whether or not resource units are available. The amount of such planning varies from school to school and differs among classes in the same school. The class which is new to the core curriculum and problem-solving techniques and has been accustomed to having the teacher direct all of its activities, may not be expected to exercise democratic privileges easily or wisely. A gradual development is essential with such a class.

In any case, the teacher must start where the learners are and little by little as they gain confidence and competence through practice, lead them to increase the activities and decisions for which they assume a share of responsibility. Pupils previously uninitiated may at first be asked merely to decide among several possible field trips the class might take or between two types of culminating activities. Later, groups within the class may plan the carrying out of activities assigned by the teacher. Still later, they may suggest and discuss possible activities, and when they have learned the techniques of working in committees, divide themselves into groups which will develop the activities. Finally, they will be in a position cooperatively to do as much planning as is permitted, i.e., selection of the unit or center of interest, statement of the problem, setting up the objectives or goals, deciding upon activities which will take them on their way toward solving the problem and reaching their goals, and the evaluation of their accomplishments.

Alberty emphasizes that it is the teacher's responsibility to see that cooperative planning is intelligent and educational. "If it hogs

⁴⁶ *Ibid.*, p. 14.

down into interminable discussions, bitter conflict, and aimless wandering," he continues, "it is deserving of all the criticism that has been heaped upon it by conventional educators. The wise teacher will recognize the points at which decisions should be made and will keep the group working constructively and effectively. If he cannot do this without resorting to coercion, it is probably evidence that he has made a mistake in judging the level at which the group can work cooperatively. In this case, he will have to start again at a lower level."⁴⁷

New York City's "Suggestions to Teachers of Experimental Core Classes"⁴⁸ states that when planning is finished, every member of the class must know what the project is, why it is being studied, and what his responsibilities are. It is recognized that procedures are difficult for children to learn, that cooperative planning takes much time, but that when it is well done it is profitable from the standpoint of educational values. Cooperative planning in this City "includes not only the selection of a topic or unit but determination of the method by which the problem or topic will be studied; subtopics that must be explored; interviews to be obtained; films to be viewed; trips to be taken; material to be read; and committee responsibilities to be carried out." Evaluation is also considered an important part of cooperative planning.

Some schools which do not have generally prescribed resource units use the orientation unit to induct pupils into democratic procedures. The curriculum assistant at *Jarrett Junior High School*, reports that at the beginning of each grade the core class starts out with orientation—more of course in the seventh than in succeeding grades. The teacher makes some assignments during this period. Sometimes an interest is aroused during orientation which builds up into a unit. This is called a spontaneous center of interest. In planning, short bright sessions with high interest are recommended. As soon as interest begins to wane, planning must stop, otherwise quality will be poor. It may take 2 weeks to set up the first unit.

Core teachers at *Denby High School* follow the orientation unit with one on democracy. This unit serves as a bridge from the procedure in a teacher-planned class to that of a teacher-pupil planned class. In the development of this unit there is opportunity for pupil selection combined with a certain amount of teacher-assigned work. Toward the end of the unit more and more decisions are being made by the pupils and teacher rather than by the teacher alone. Follow-

⁴⁷ Alberty, Harold. *Reorganizing the High School Curriculum*. Op. cit. p. 350.

⁴⁸ *Suggestions to Teachers of Experimental Core Classes*. Op. cit. p. 5.

ing a study of the rights and obligations of an individual living in a democracy is a consideration of whether or not a class in school can be run on a fairly democratic basis. This, of course, involves a study of how such a class would be different from other classes and what rights and obligations an individual pupil in such a class would have as well as the rights and obligations of the teacher in such a situation.

The question arises as to whether the core class might not try such a procedure. To date no class has voted this down. After making this decision, the class is ready for determining its type of organization and planning its future procedure. It is then a Core class and ready to take its first real steps forward. Introduction to the work is not rushed. In some classes it may move much more slowly than in others. The purpose is not to cover a certain amount of material but to give every pupil time to adjust and gradually to feel himself to be a vital part of the group and to begin to assume the responsibilities which must rest on him if the group is to function democratically.⁴⁹

⁴⁹ Zapf, R. M. and Mulder, Fred J. Core Teaching at Denby High School, Detroit, Mich. 34 p. (unpublished).

Relationships

The administrator who wishes to bring about changes which break from the traditional to the extent that the core curriculum does must assure himself that he will not run into community opposition. A good public relations program is sound insurance. Parents will want to know why a change is contemplated, what the proposed program is like, what its advantages are over the one to which they are accustomed, and what specific benefits their boys and girls will receive from it. In many instances they will feel the need to discuss the potential outcomes and to consider whether these are the ones they desire for their boys and girls.

Consultation and discussion take time, but the alternative too frequently is the breakdown of the program. Parents who have not been consulted in the planning stages and who do not have an understanding of the basic philosophy are quick to criticize any weaknesses, or seeming weaknesses that appear. If criticism gains momentum, as it often does in such situations, the principal may be forced to remove the program altogether, to regress to a type of program which is a mere correlation of subject matter, or to allow the program to function on an optional or elective basis.

It is usually a small but vocal minority which is responsible for any forced regression. Faunce and Bossing⁵⁰ illustrate this in a reference to the retrenchment in the core program in the secondary schools of one of our large cities. An opinion poll showed that 74 percent of the public had never heard of or did not understand the meaning of the program and that of those who did, nearly twice as many favored it as were opposed, yet that program was under fire in the city and as a result of the efforts of a small minority group the schools were forced to make the core optional wherever it was offered. They point out that "had the schools been enlisting the aid of parents, and particularly the P.T.A., in solving its problems, such a condition would not have existed. In one school community largely devoted to the core program, the opposition could scarcely create a ripple of concern because of an active and informed parents' organization."

⁵⁰ Faunce and Bossing. *Op. cit.*, p. 244 and 254.

Among the problems listed by high-school principals in the present study, public relations ranked considerably below several others, only 43 reporting this as a major concern. They mentioned specifically the failure of parents or the public to appreciate the core program; hostile or indifferent attitudes of parents; difficulty in selling the program to all members of the community; and reluctance of parents to help in developing the curriculum. The relatively small number of schools reporting such antagonism or indifference may indicate that the seriousness of the problem is in its intensity in those situations in which it exists rather than in the extent of its existence.

Just as essential as the initial informing of the public is a policy of continuous development of community understanding. New people come into the community and parents who may have been indifferent before their children reached the high school become interested in knowing just what exactly is core.

Acquainting Parents With Core

Continuous interpretation supplemented by special studies can dispel doubts

Whittier Union High School which has had a core or "basic course" for the past 14 years, finds it necessary to work continually with parent groups interpreting the school's program through various media. The school has established a series of meetings for parents on the different grade levels called "Know Your School." Various teachers interpret the program, presenting materials, outlines of work, etc. The principal feels that these meetings are successful and adds that over the years most of their parents have assured them of their value. If a question of the effectiveness of some aspect of the program is raised, the school makes a special study.

When a group of parents were concerned recently about the presentation of English in the core, fearing their children were not being grounded as well as they should be in the fundamental skills—spelling, reading, and writing—a study was made by the county superintendent's office of the reading grade placement of pupils. The junior class was studied with the idea of comparing the reading achievement of the pupils as juniors with their reading grade placement when they were freshmen students in the high school. Results showed that the reading grade level did increase; in many cases more than three grade levels of reading accomplishment were noted. Further, retention of juniors was proved to be greater than the average for the county.

The success of an elective program depends upon good public relations

Schools in which core programs operate on an elective basis are more likely to have invited parents to join in educational planning than are those which enroll all pupils in core classes. Schools which have initiated an experimental core in one or two classes or those which have found it necessary because of objections raised to retrench from a required to an elective status, recognize the necessity for informing the public. Elective core programs, incidentally, are more frequently found in senior than in junior high schools.

Illustrative of programs offered by such schools is that of *Highland Park, Ill., High School*.⁵¹ The school begins its public relations work with the elementary schools which feed into it. Members of its staff are constantly working with the upper-grade teachers and guidance people in these schools to acquaint them with all the programs the high school offers, thus providing them a better basis for counseling next year's freshmen. The core is explained in the same manner as are the other programs, thus avoiding any criticism of favoritism or discrimination. Likewise, at the meetings held with eighth-grade parents before their children register for high school, all the offerings for freshmen are discussed. The purposes and methods of the core are explained and parents are shown the continuity of the program through the 4 years.

A policy of ~~emphasis~~ emphasis on the several phases of the school's total curriculum is continued with the Board of Education whose members are kept informed of the purposes of the various departments of the school through the practice of having a dinner at each board meeting participated in by a different department each time. Core comes in for its regular meeting and in that way the school board has an opportunity to become better informed about its purposes, activities, and status.

Parents of boys and girls enrolled in core classes come to the school at least once a year for evening meetings. At one meeting the staff may explain what core classes are doing and invite a discussion of problems and comments about core that have arisen in the community. At another meeting there may be a demonstration of a typical core group in operation. Frank discussions between parents and teachers, with opportunity to observe what actually does take place in core classes, often resolves the doubts that arise in a parent's mind as he becomes aware during the year of the decreased emphasis on traditional textbook learning, which the core program assumes, and discusses his doubts with other parents in whom similar doubts have arisen.

⁵¹ *The Core Curriculum at Highland Park High School. Highland Park, Ill., The High School, 1951. 20 p. (mimeo.)*

Any pupil may elect the core course in the high school. Thus core classes are the same as any other heterogeneous classroom group. This has pleased non-core teachers who had felt earlier that the core course had held an unfair advantage in that above-average pupils were selected for it. A pupil who elects the core course in the ninth grade may follow it through each of the 4 years, or he may transfer to a straight-subject program at any time. If, however, he did not elect the core course in the ninth grade he may not elect it in any later grade. Such practice is not uncommon. When the basic skills and techniques of thinking together, working together, and problem-solving are learned in the ninth grade where much time is spent in developing them, it is thought that anyone entering at a later year is at a distinct disadvantage.

**Lawrenceville, Ill., High School
sends home mimeographed accounts of core activities**

Lawrenceville High School apprises parents of what goes on in its unified studies classes. Each quarter a mimeographed report prepared by the unified studies teacher is transmitted to the parents of pupils in these classes to enable them to know and better understand what is happening in the classroom. At the end of the mimeographed statement are evaluations of the individual pupil: one by the teacher, one by the class, and one by the pupil himself. Because of the possibilities this sort of communication may have in promoting parent understanding, there is quoted here the first fall report by one teacher of what one of his sections has accomplished.

Section two of the Unified Studies class chose and developed an outline of study based on various vocations. This topic of study was decided upon by the class because there was a unanimous feeling that there was a need to learn more about many occupations so that each student might choose and plan his own life's work more intelligently and purposefully. Each student was urged to seek the advice and help of someone in the occupation for which he was responsible to report on.

The students have advanced most readily in such skills as organizing and presenting material to the class. Most students have greatly improved in willingness and ability to speak before the group. At this time, we are completing the last unit and are now engaged in planning our next unit of study.

Our fine arts period was limited to listening, understanding, and enjoying the music from the *Student Prince*. A one-act play was presented.

The English program consisted largely of writing a business letter to various universities requesting catalogues for our school library, a theme requiring use of imagination, an auto-biography and some record writing in each student's personal journal of class activities. Those who accepted these challenges have made an important contribution to their own education and writing skills.

A magazine of current events acts as a basis for our own discussion periods and both the school library and county library serve as sources of information for student research work.

To supplement the unit work several classroom movies added to our understanding of both English and citizenship. The movies were: *Do Words Ever Fool You*, *Using the Dictionary*, *The Road to Citizenship*, *Making the Most Out of School*, and *This Is Oil*.

A campfire, hayride, and barn dance made up a successful program of class parties. These "get-togethers" help a great deal in later pupil-teacher relationships as well as affording wholesome recreation for all concerned.

Evanston, Ill., Township High School Involves parents in core

Involvement of parents in the core curriculum is one of the outstanding features of the program at Evanston. Each spring, parents of eighth-graders who will be entering the high school in the fall must decide whether or not they wish their boys and girls to enroll in core (formerly referred to as New School). Enrollment is limited to the number of pupils who can be accommodated in one of the high-school's large homerooms. Eighth-graders who apply are selected so as to constitute a heterogeneous group from the standpoint of race, religion, and economic status. The average I.Q. of the group must be the same as that for the school as a whole.

In the fall, parents are brought into the program early. Each is given a sheet listing suggestions such as the following:

1. When your child becomes a member of the Core Studies, you as parents become active members also. We hope you will be willing to visit core regularly and often.
2. You will need to understand the fundamental aims of Core Studies and to help interpret them to other mothers and fathers and to your own child.
3. It would be helpful if you would provide chaperonage or transportation or both for parties or excursions whenever possible.
4. An offer to provide hospitality for the core, such as lending your kitchen, living room, backyard, recreation room, and providing simple refreshments, will be welcomed.
5. An offer to assist the core mother with telephoning will be appreciated.

The opening event, usually the last week in September, is the Freshmen Parents' Dinner, which gives opportunity for parents to meet each other as well as the teachers. During October, informal discussion meetings for parents of core students are held. Philosophy, problems in core, problems of behavior at adolescence, and educational trends are discussed. These meetings are planned by "core mothers."

"Core mothers" are the liaison agents between parents and the school. Each class has a core mother, who visits the class often and encourages the visits of other parents. The several core mothers and chairmen of the various committees make up a P.T.A. Board that meets once a month to consider progress, to plan for general meet-

ings, and to discuss social aspects of the program. If the Board decides a greater emphasis on English is needed, pupils are given more English; if it believes a general meeting should be called, that is done. Every core party or trip is assisted by one or more parents. A news letter, issued several times a year, also helps to keep parents of core pupils informed of what is going on.

In order to maintain continuity in its work, the school has organized a Parent Planning Committee. This committee, composed of parents of pupils now in the program, staff members, and interested people in the community, oftentimes including parents whose children have graduated, devotes its time and attention to over-all plans and policies.

When a publication describing the core program was being prepared, a preliminary draft was sent to parents asking their help in telling what the program is. Replies came back from almost every family. Many parents, of course, said simply, "This is fine." Some, however, gave specific suggestions for content. The staff believes that the unusual parent interest and loyalty are "two of the outstanding contributions that the Core Program has made to the school as a whole." These are manifested in helpful evaluation, gifts, curriculum planning, and in actual classroom participation.⁵²

Common Learnings at West Junior High School, Kansas City, Mo., Integrates school and community

Many of the problems of study at *West Junior High School* are those which originate in the community. Parents through their children's activities have an opportunity to learn what pupils do in common learnings. Community problems are numerous. The school is in a blighted area with inadequate facilities for education and recreation.

Since the introduction of common learnings, issues of each school election are included in the curriculum as an important community problem. The principal states that when pupils study and understand all the facts, pro and con, the voters always approve the proposed levy in this high-school district. In April 1951, core classes visited were concerned with learning all they could about the school building bond issue to be voted on late in May. A sizable sum was to be earmarked for the West Side if the levy carried. Pupils studied not only aspects of the Kansas City situation, but compared Kansas City with the Nation. Finances of the school money issue were studied and worked on in arithmetic classes. Pupils were active in arousing

⁵² The Core Program of E.T.H.S. *Op. cit.*

their parents' interest and in getting them to campaign for it. As a result, when votes were counted, 82 per cent of those in the high-school district were favorable; only 66.6 per cent was required.

Juvenile delinquency, with its high rate of incidence in the district, became the problem for investigation by each of the five ninth-grade common-learnings classes in 1950-51. Excerpts of reports by pupils of the several sections which appeared in an issue of the school paper show how common learnings classes tackled the problem:

9A.—We have made graphs and speeches to show the juvenile offenses and we are sorry to say that West Junior holds fourth place in having the most cases during the year 1950. We have found that most offenses occurred during our summer vacation, when there is nothing for teenagers to do in their spare time.

9B.—We have been studying about juvenile delinquencies—what the causes are, how they came about, and how to prevent delinquency. We have made booklets in our leisure time activities on finding different ways to have fun and keep out of trouble. We have made speeches, charts, graphs, and slides to show how West Junior ranks with other high schools in juvenile delinquency.

9C and 9D.—We presented a citizenship program in assembly, March 26. The program was centered around the subject of juvenile delinquency. All class members helped to find and assemble the material used. The program itself consisted of lantern slides and prepared talks. Our classes are looking forward to some field trips. We expect to visit the City Hall and Police Department on these trips.

9E.—We have found that most delinquents come from the slums of our cities where the housing conditions are bad. To prevent juvenile delinquency most cities are tearing down the slum areas and putting up housing projects and building playgrounds so the children will not run around in gangs and get started on careers of crime. Why can't Kansas City start a housing project on the West Side to take the place of the houses they tore down, and have rents that normal working people can afford?

The 1951-52 common learnings classes continued the study begun in 1950-51. They will report in assembly as to whether juvenile delinquency in 1951 was less than in 1950 after special emphasis had been given recreation and citizenship in school and in other institutions of the community with which the school works closely. These classes interviewed the leaders of all the institutions, organizations, and neighborhood centers which have planned recreation for boys and girls who live on the West Side and reported back to the school their scheduled activities for their age groups. They have studied the many causes of crime by youth in the city and in the high-school district. They have made a specific request for improvement of park and playground facilities through their recommendations for making a playground of an old water reservoir of three blocks. An interview

with a representative of the water department determined that that department is no longer interested in the reservoir as such. Specific recommendations were made for improvement and development of the site as a recreation area. The class which drafted the recommendations represented the West Side Community Council in a petition to the City Park Board in January 1952.

Staff Support

Essential to the establishment of good public relations is the understanding and support of the entire faculty of the school. Too often a few members of a faculty may undermine a program by failing to give it support and by expressing doubts as to its value.

Principals do not generally recognize lack of staff support as a major problem, however, judging by the fact that only 22 of the principals reporting in the present study included it. Evidence that it is a potential problem at least is revealed by inquiries addressed to core teachers in the State of Maryland in 1950.⁵³ These teachers were asked their opinion of the attitude of the public, pupils, and teachers to the core program. Results show the teachers believe that the staff itself is more unfavorably disposed to the core than are either parents or pupils. The inference can be drawn that if the staff is not in sympathy with the program its success is dubious.

Percentage distribution of opinions of Maryland teachers of core programs as to attitudes toward core of pupils, parents, and teachers.

Attitude toward core of—	Favorable	Non-committal	Do not know	Unfavorable
1	2	3	4	5
Most of your pupils.....	66.2	14.1	6.0	13.7
Most parents you know.....	31.2	27.7	22.6	18.5
Most teachers in your school.....	33.6	25.0	12.4	29.0
Most high-school teachers you know.....	14.6	12.9	31.5	41.0

Schools which are aware of the need for the support of all their staff use various means to further better understanding. Faculty meetings may be devoted to the core program. Core teachers and students may explain its objectives and give demonstrations of activities and methods of teaching. One school reported that noncore teachers are invited to observe core classes in action.

⁵³ Mumma. *Op. cit.*

Observation of good core classes, preceded or followed by a conference with the core teacher, can be both enlightening to the observer and rewarding to the school. Core classes are accustomed to visitors. They and their teacher are usually courteous and helpful to one who wants to understand their purposes and their accomplishments. This is important for noncore teachers who may have had no opportunity to learn about the core curriculum, but who have developed ideas from hearsay and outside-the-door observation. To many of these a core class represents confusion. They have seen that pupils are not sitting in rows raising their hands to recite; the teacher is not dominating the class; in fact, it may take a second look to spot him at all; pupils are talking in groups, sometimes noisily; or the whole class may be excitedly laying plans for some activity, something that they will all enjoy. Enthusiasm runs high; there may be a round of applause; something said may bring on hearty laughter. The non-core teacher who does not understand the value of the democratic process of the core program and who does not have an opportunity to observe classes in operation for a whole period or for several periods, may be appalled by this "confusion." "How can learning take place in such an atmosphere?" may be his summing up of the situation.

Staff support implies principal support as well as that of faculty. If the principal himself is not sold on the possibilities of the core curriculum, the program is most certainly doomed to extinction or at best to mediocrity—core organization without core content or method.

Pupil Understanding

Pupils as "ambassadors of the school to the home" are important in promoting the understanding and gaining the support of parents. Too often pupils are not well-grounded in the purposes of core. Consequently when they are asked at home about the program they are at best vague and evasive, at worst hostile to procedures followed. This point is borne out by a study of reactions of selected citizen groups in Los Angeles to certain curriculum elements.⁵⁴ Merkley reported that many of the school's graduates were dissatisfied with the curriculum outcomes because they did not understand the philosophy upon which the program was based.

In a study of 107 core students, grades 7-12 at Ohio State University

⁵⁴ Merkley, John L. Reactions of selected citizen groups to certain curriculum elements. Doctor's thesis, 1944. Los Angeles, University of Southern California. 464 p.

School, Hendrickson⁵⁵ found that most of the pupils understood well one or several of the purposes of the core program but had difficulty in expressing them. Very few students said they remembered any kind of orientation to the purposes of the core program. Difficulty in intellectualizing experiences was also encountered in the students' attempts to compare teaching methods in the core programs with those in the "special interest areas." Unless pupils are able to intellectualize their experiences they will not be able to transmit from the school back to the home the underlying purposes of core methods and processes.

In general, however, Hendrickson found that students' attitudes were favorable to core and its processes, 78 percent of the pupils expressing preference for core over a subject-centered curriculum. When the core pupils studied were asked their opinions of their parents' attitudes toward the program, 68 percent of the parents were mentioned as having favorable reactions; 7 percent were indifferent; 14 percent had questions or doubts or divided opinions; and 6 percent were said to feel outrightly negative about it. The amount of positive parental reaction toward the core showed a slight rise through the grade distribution from 7 to 12. The author points out that, "In an evaluation of what these particularly positive figures mean, it must be taken into consideration that student opinion of the core program is highly favorable, and that through the close connection of parents and children their mutual influence upon each others' attitudes is natural."

⁵⁵ Hendrickson, Carol Eve. The attitudes of students toward the core program of the Ohio State University School. Master's thesis, 1950. Columbus, Ohio State University.

Evaluation

By the Pupils

Evaluation of growth of pupils in objectives set by core is done informally by the pupils as a part of a core unit. Usually evaluation takes the form of discussion by pupils and teachers of each of the goals or objectives which the class had drawn up at the beginning of the unit or at the beginning of the term to guide its progress. Sometimes it may be a written assignment by the teacher. Occasionally it is a checklist or rating scale prepared by the teacher for use by pupils.

Evaluation may be both individual and group. "How well did the group carry out the activity which was its responsibility?" leads to thinking about the situation. "How well did I cooperate with others in my group?" calls for individual introspection.

In many classes pupils have learned to offer each other constructive suggestions for improvement and in turn to accept those suggestions from their peers, severe though they may be, in the spirit in which they are given. An ideal core class is not tolerant of slackers in the group. Each pupil is expected to contribute the best of which he is capable to the group effort. No one is snubbed; there are no cliques.

One master teacher who was not convinced that core is a panacea, was nevertheless enthusiastic when she said, "It does wonders to bring out individuals!" She told of the boy who, because of a disagreeable noise in his throat when he spoke, would not participate at all in the first months in core, but who "now (toward the end of the year) is an active participant in all class discussion." In this class the practice had developed of having an oral evaluation followed by self-rating on the following items:

1. Individual work: preparation, presentation, control of group, and leading discussion.
2. Group work: participation in core activities, social events, and class discussion.
3. Personal characteristics: leadership, responsibility, attitude, initiative.

By the Teacher

Of individual growth

In his evaluation of individual pupil growth, the core teacher gathers information from many sources. Achievement test results are, of course, one source. Since the objectives of core are so much broader than the acquisition of fundamental skills and prescribed subject-matter content, many other criteria must be taken into consideration. Wayne High School lists 19 devices which its teachers use to evaluate individual growth. Among these are: informal observation of general attitudes and reactions, as well as of attitudes in specific situations, participation in discussions, study habits, social adaptation; teacher, self, and peer evaluation registering opinions on the basis of leadership qualities, degree of participation, changed behavior, personal growth, etc.; sociograms; standardized tests of personality, intelligence, reading, aptitudes; personal interviews and conferences with pupil; anecdotal records; parent conference and parent evaluation; interest check lists; cumulative records.⁵⁶

Of group progress

A checklist for use by core teachers may be an in-service education device, or it may be an evaluative instrument for surveying group progress, or both. A list developed by core teachers of Furness Junior High School in Philadelphia includes a series of items under each of the following major headings: teaching ideals, attitudes, appreciations essential to democratic life; meeting the needs of early adolescents; teaching the social skills; teaching the communication skills; utilizing all resources and methods; utilizing the social studies and the sciences; utilizing the arts. The list deals only with desirable attitudes, ideals, appreciations, and skills, not with specific factual information which will vary with different units.⁵⁷

A checklist used by the teacher is a learning experience for the teacher. Appraisal of group progress by the class is an educative experience for the class. It brings into focus the criteria, objectives, or goals which they had set for themselves, and gives them an opportunity to intellectualize and to become articulate about the purposes of core. It likewise furnishes the teacher valuable evaluative information.

The teacher's own general observation of class improvement is an important informal technique. Especially if the teacher keeps

⁵⁶ Reported in Furness and Boasing. *Op. cit.*, p. 270. See chapter on Evaluation for further information on evaluating individual and group progress.

⁵⁷ A Check List for Core Teachers. An Evaluation Instrument. Philadelphia, 48, Pa., Furness Junior High School, 1949. 11 p. (mimeo.)

records of progress will be able to note improvements in effectiveness of planning, in judgment used in handling social situations, in attitudes of acceptance of each of its members, and in use of democratic procedures.

Of effects upon the total school

If the core curriculum is successful in achieving its goals, its impact will be felt throughout the entire school. There may be a strengthening of the extracurricular program, better school morale, and a greater degree of cooperation in all school programs. Noticeable improvement in the holding power of the school and in average daily attendance, a lessening of teacher turnover, and a decrease in disciplinary problems may result from the introduction of the core curriculum.

Barratt Junior High School in Philadelphia reports that before the introduction of the new program in 1942, an average attendance of 85 percent represented a high month. There was a high teacher-turnover. Discipline was a problem; there were often as many as 70 cases a day referred to the principal's office. Under the old regime, the emphasis was on the acquisition of facts; failures were common.

As possibilities for improving the situation were being considered, the thought uppermost in the minds of the leaders was that until people know children they will have much trouble teaching. A suggestion that teachers stay with children for longer periods met with little favorable reaction from teachers who were dubious about their ability to teach subjects other than their specialty. The principal assured them they would receive help. As a consequence, eight teachers volunteered to try the program. The number was supplemented with nine teachers from elementary schools whom the superintendent had sent in response to the principal's plea for teachers "not of math, or of science, or of English, but teachers who know something about children."

These 17 teachers began working primarily with groups of overage pupils. Enough of such had been found to make 11 sections. The pupils were placed in eighth- and ninth-grade sections even though most of them were below academic standards for those grades. Teachers were told that the important thing was to get to know these boys and girls and to start with them where they were. Each teacher was given a group of pupils for four consecutive periods. Teachers might teach separate subjects or units during this time, as they preferred.

The program at Barratt is, in general, core-type rather than core, but the principal feels that it has accomplished much for the school. Ninety-four percent attendance is usual; attendance never falls lower than 91 percent in any month. Teacher turnover has been reduced to one or two teachers a term. Disciplinary referrals are few.

Controlled Experiments

Controlled experiments to determine the effectiveness of core were conducted at *Midwood High School* in New York City⁵⁸ and at *Oak Ridge, Tenn., High School*.⁵⁹ The objectives formulated for the core curriculum, which became the basis of evaluation, were substantially the same in the two schools: As stated in the Midwood experiment, they are:

1. To develop effective work habits and skills.
2. To develop effective methods of thinking.
3. To assist the pupil in personal and social adjustment.
4. To develop social attitudes and a sense of social responsibility.
5. To widen interests, expression, and appreciations.
6. To acquire fundamental knowledges and understandings.

At Midwood, 94 matched pairs of pupils were tested at the beginning and at the end of the school year with the following tests:

- Cooperative English Test C1, Reading Comprehension.
- Cooperative Test of Social Studies Abilities.
- Cooperative Mathematics Test for Grades 7, 8, 9.
- Wrightstone Scale of Civic Beliefs.

At Oak Ridge, 28 matched pairs of pupils were given the following tests in December 1949 and again during the latter part of May 1950. A limitation of the study, it is pointed out, is that the experimental factor was permitted to operate less than 5 months.

- Cooperative English Test A—Mechanics of Expression.
- Cooperative English Test B2—Effectiveness of Expression.
- Wrightstone Scale of Civic Beliefs.
- Wrenn Study Habits Inventory.
- Hesten Personal Adjustment Inventory.

Both experiments reported greater gains for the experimental than for the control groups. The Midwood findings indicate that "stu-

⁵⁸ Wrightstone, J. Wayne, and Forlano, George. Evaluation of the Experience Curriculum at Midwood High School. *High Points*, 30: 35-42, December 1948.

⁵⁹ Capahart, Bertis E., Hodges, Allen, and Berdan, Norman. An Objective Evaluation of a Core Program. *School Review*, 60: 84-89, February 1952.

dents in the experience curriculum have shown commendable gains in academic skills, powers of thinking, and civic attitudes. Studies of student interests, appreciations, personal and social adjustment . . . revealed similar commendable gains by the experience curriculum." The Oak Ridge experimenters reported that "while the mean gain differences in favor of the experimental group are not statistically significant, they are conspicuous by their consistency." They conclude that the probability of finding large changes or significant difference is not too great because of the many uncontrollable factors, and because the tests available are at best only approximations of the kind of measurements needed to appraise progress toward the objectives as set up. They recommend:

Testing groups over a period from the entrance into the ninth grade through the eleventh year, utilizing one group that will have three years of a core program and one group that follows a straight curriculum pattern.

Locating and testing in similar fashion two such groups in two different schools.

Conclusions

1. As curriculum committees study ways of providing for the personal and social needs of youth and of making instruction more meaningful, increasingly they try the core curriculum.

2. Adoption of the core pattern of organization sets both a physical and psychological stage for curriculum change. The longer block of time releases the teacher from the limiting effects of the usual 40-minute period. Activities planned for his classes no longer need be contained within the walls of the classroom. Organization of instruction on a problem-solving basis seems more nearly feasible to a teacher who has two or, at the most, three classes a day than it does to a teacher with five classes. Likewise, when the total number of pupils a teacher must know is reduced by half, as it is in the core pattern of organization, the possibility of knowing his pupils better is doubled. When homeroom or study-period time is added to the time a teacher spends with a group of pupils, as is frequently the case, his ability to help them is further increased. Possibilities for growth are limited only by the vision of the staff and its willingness to seek constant improvement.

3. Most schools which introduce the core pattern of organization begin with the unification of English and social studies in a modified core approach (types A or B). Some never progress further. For one reason or another—loss of leadership, rigid requirements for subject-matter teaching, public disapproval, or sheer ignorance of how to proceed—progress is halted before the staff reaches a pupil-problem basis of operation. In other schools, however, the unification of subjects is only the first step. Pupil-teacher planning, the substitution of democratic leadership for teacher-domination, the opportunity given by the lengthened period to know better a group of boys and girls, carry the classroom program forward. Strong principal leadership encourages teachers to work together on next steps. Thus a true core curriculum (types C or D) is evolved.

4. The principal is the key person in promoting the development

of the core curriculum. Unless the principal is enthusiastic about the possibilities of the core approach, and gives active support to its development, the school's program will be modified but little. Even a master teacher can have small influence outside his own classroom if the principal is merely permissive in his attitude. Principals who have worked in schools which have had a flourishing core curriculum, are almost without exception convinced of its worth. They desire it for the school they serve, and if the approach is accepted by the staff, they give it their enthusiastic support.

5. If the chief obstacle to the further development of the core curriculum is the lack of qualified teachers, as high-school principals have pointed out, then the greatest eventual hope for the core rests with teacher-education institutions. Only a few such institutions so far have accepted responsibility for the preparation of teachers of core to the extent of actually designing special programs, but there is what seems to be the beginning of a trend.

6. Advancement of the core curriculum in the years immediately ahead depends upon the reorientation of teachers now in service. Most of these teachers were trained as subject specialists. To many of them, therefore, the techniques of cooperative planning, of counseling youngsters, and of practicing democracy in the classroom are new and untried. The typical high-school principal initiating a core program provides a program of in-service education. Most of the principals reporting in this study provide for discussion or workshop groups meeting at regular intervals throughout the school year.

7. Provision of a conference period during the school day for core-teacher planning is a characteristic feature of the most successful of the Types C and D core programs. Principals so schedule their classes that all core teachers in a grade have the same period free for working and planning together. Such a period is an excellent in-service device, continuing year after year, provided the principal lends his support through frequent participation, or if other leadership is present to promote growth.

8. By providing opportunities for teachers to work together in in-service education programs and in conference-time planning, the core curriculum is a potential force in promoting better staff relationships.

9. Because the core program increases public interest in the school, it can help to promote better school-community relationships. Retrenchments in some localities due to lack of understand-

ing of and sympathy with core on the part of some members of their staffs and the public are causing administrators increasingly to involve the public as well as all of the staff in discussions and study of the type of curriculum the schools should offer. Whether the result is the core curriculum or some other type of program, the closer working together of school people and the public they serve should help to improve school-community relationships.

10. Programs of evaluation of the core curriculum are needed to provide evidence that the claimed outcomes are realized. Many of these outcomes concern intangibles difficult to evaluate. When educators can point to improved social attitudes, better civic behavior, equal or improved competence in basic skills, plus information or knowledge of the type needed by everyone, a wide acceptance of the core curriculum will be assured.

Appendix

INQUIRY ON THE OPERATION OF CORE PROGRAMS IN SECONDARY SCHOOLS

1. Circle grades which use the core program in your school: 7 8 9 10 11 12
2. Check the statement which most nearly describes the core program in your school. If more than one type exists in your school, check each. Use a double check for the one which represents most common practice.
 - a. Each subject retains its identity in the core, that is, subjects combined in the core are correlated but not fused. For example, the teaching of American literature may be correlated with the teaching of American history. The group may be taught both subjects by one teacher or each subject by the appropriate subject teacher.
 - b. Subject lines are broken down. Subjects included in the core are fused into a unified whole around a central theme, e.g. "Our American Heritage" may be the central theme for a core unifying American history and literature, and possibly art and music.
 - c. Subjects are brought in only as needed. The core consists of a number of broad preplanned problems usually related to a central theme. Problems are based on predetermined areas of pupil needs, both immediate felt needs and needs as society sees them. For example, under the theme, Personal-Social Relations, there may be such problems as school citizenship, understanding myself, getting along with others, how to work effectively in group situations. Members of the class may or may not have a choice from among several problems; they will, however, choose activities within the problems.
 - d. Subjects are brought in only as needed as in "c" above. There are no predetermined problem areas to be studied. Pupils and teacher are free to select problems upon which they wish to work.
3. Do you plan to change from the type of core you are now using to another type? (If you use more than one type, base your answer on the one you have double-checked above.) Yes.... No.... If "Yes," to which type will you change? (check): a.... b.... c.... d....
4. If the core is used only in the lower grades of your school do you have plans to extend its use to the higher grades within the next year or two? Yes... No....
Remarks: '

5. What subjects does the core replace?.....
6. Please give for each grade which has a core program the percentage of pupils enrolled in core classes.
 7th..... 9th..... 11th.....
 8th..... 10th..... 12th.....
7. To what extent is ability grouping used in assigning pupils to core classes?
 Not at all One of several important factors
 Slightly The principal factor
8. Does a core class normally meet for consecutive periods? Yes..... No.....
 If not, do you think such an arrangement would make your work more effective?
 Yes..... Probably..... No.....
9. How many minutes, in the clear, are in a class period?..... How many class periods are in a school day?..... How many periods a week does a core teacher spend with one core group? (Give variations by grade, if any).....
10. On the average, how many minutes per week of school time are core teachers allowed for planning?..... Other teachers?.....
11. Is there an in-service training program for core teachers? Yes..... No.....
 If so, is it (a) a one-day institute..... (b) a summer workshop of several days..... (c) a discussion or workshop group meeting at regular intervals throughout the school year..... (d) other (describe).....
12. Check each of the following which is a characteristic feature of your core classes: homeroom....., student government planning....., school activities.....?
13. Do you find the supply of well-prepared core teachers adequate to the further development in your school of an enriched core program? Yes..... No.....
14. What teacher-education institutions from which you draw teachers have programs especially designed for training core teachers?.....
15. Does the method of marking used by the school require that separate marks be recorded for each of the subjects unified in the core? Yes..... No.....
16. If you are developing procedures for evaluating the work of core classes or if you have any results bearing on the effectiveness of instruction in core classes, will you please send us any available material.
17. What are your chief problems in operating a core program or in furthering its continuous enrichment? (Please list)
Principal.
Date.

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