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A Study of Team Teaching as Implemented in the Elementary School

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A STUDY OF TEAM TEACHING
AS IMPLEMENTED IN THE
ELEMENTARY SCHOOL

by

Mary E. Myers

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Clifford N. Peltz
Project Advisor

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CHAPTER I
BACKGROUND

At present, education is in an era of widespread experimentation, perhaps more extensive than at any other time in its history. An intense examination of the methods of elementary school operation has been under way on a national scale and has resulted in the development of numerous new organizational and instructional approaches.¹ Major areas of concern include changes in scheduling, the utilization of various kinds of materials and technical equipment, the tapping of personnel resources, and re-appraisal of curriculum. Team teaching, as an emerging pattern of school organization is linked with the many developments aimed at improving the quality of instruction.

This movement appears to be a positive one; however, there must be reasons for such widespread experimentation. A need must be established and a rationale developed before a change, particularly one so complete as team teaching, can be considered justified. Perhaps at this point it would be helpful to discuss some general

¹James Ballen, Jr., Schools of Tomorrow--Today (Garden City, N. Y.: Doubleday & Co., Inc., 1960), p. 6.

conditions currently prevailing in the United States. For the most part, these have been developing gradually and have not hit with immediate impact; yet, they greatly affect the trends in education, and based upon them, numerous changes have received justification.

First, there is a persistent teacher shortage; this is both a quantitative and a qualitative problem. It is generally recognized that the population growth in the United States has been rapid, particularly since World War II. Simply stated, a shortage results when the increase in the number of elementary school students is significantly greater than the increase in the number of certified teachers trained during the same year. In 1900, public elementary and secondary school enrollment was 15,503,110; by 1930, it had risen to 25,678,015. One source estimated that total enrollment in 1962-63 was 39,700,000, of which 74 per cent was elementary school enrollment.²

In addition to the population increase, one source estimates an annual ten per cent teacher turnover rate.³ Newly created occupations, or those formerly reserved for men, are now open to women. Services in the education field

²Ford Foundation, Time, Talent and Teachers (New York: Ford Foundation, Office of Reports, 1960), pp. 6-8.

³Ibid.

aside from direct teaching, such as counseling, therapy, social work, and subject-matter specialization, are attracting would-be teachers.

The quantitative problem is fairly obvious. The factors cited as reasons for it also contribute to the qualitative aspect of the shortage. The large annual teacher turnover undermines the effects of research and development in that they cannot reach a great number of children. Because of the attractions of other occupations, persons of exceptional ability are turning from actual teaching positions, frequently forcing the acceptance of unqualified replacements.⁴ There is a critical need, not only to recruit, but to keep able people in the teaching profession. One source states that this combination of factors makes it necessary to "seek ways of altering the teacher-pupil ratio without reducing the quality of education."⁵

Second, the content of instruction in the elementary school has greatly expanded. The elementary teacher is dealing with a more complex curriculum involving the presentation of new concepts, knowledge and skills. The teacher must be

⁴Herbert J. Klausmeier et al., Project MODELS: A Facilitative Environment for Increasing Efficiency of Pupil Learning and for Conducting Educational Research and Development, Working Paper No. 5, University of Wisconsin (1st ed. rev.; Madison, Wisc.: Wisconsin Research and Development Center for Cognitive Learning, June, 1967), p. 12.

⁵Nicholas C. Polos, The Dynamics of Team Teaching (Dubuque, Iowa: William C. Brown Co., 1965), p. 11.

competent in all subject areas; at the same time, he is expected to keep up with all current professional innovations. The problem is not limited to the teacher; the effects are passed on to the students. While complete departmentalization of the elementary school is seldom seen as an answer, there is a definite need to lighten teacher load without providing a less thorough education.

Third, new insights into the nature of child growth and development have greatly affected the education field. Intellectual abilities as measured by I.Q. tests are no longer sufficient to predict academic success. The recognition of wide differences among children has led to the consideration of the uniqueness of the individual. In so doing, it has become apparent that each child may progress differently in every subject area; each should have the opportunity to progress at a pace which is challenging but not frustrating.⁶ To provide for children's needs, individualization of approach is required.

The major trends, then, have led to redefinition of basic educational purposes. Questioning has been focused on traditional concepts and practices. In particular, the conventional self-contained classroom has come under attack by

⁶ Medill Bair and Richard G. Woodward, Team Teaching in Action (Boston: Houghton Mifflin Co., 1964), p. 6.

numerous educators. Under this pattern of organization, students are assigned, usually by chance, to one teacher for all or most subjects. This teacher is responsible for the instruction of twenty to forty students for a period of a semester, or a year. He may or may not be required to teach physical education, art, or music; however, at the least, he provides the instruction in the four major curriculum areas.⁷

Aside from major instructional duties, the teacher is responsible for numerous non-teaching duties; these vary from daily routines of taking attendance, grading papers, collecting fees, and providing minor medical attention, to such tasks as putting up displays, ordering supplies, previewing films, and supervising halls and playground. A time study of the elementary schools in Bay City, Michigan, reveals that non-professional tasks take from one-fifth to two-thirds of the teacher's time.⁸ This in itself constitutes a major obstacle to good instruction.

The self-contained approach is criticized not only for its inefficiency within the classroom but for standardization within the entire school. Lobb cites the disadvantages of

⁷ Maurie Hillson and Harvey B. Scribner (eds.), Readings in Collaborative and Team Approaches to Teaching and Learning (New York: Selected Academic Readings, Inc., 1965), p. GDL-4A.

⁸ Ford Foundation, Time, Talent and Teachers, pp. 6-8.

of this regimentation. The teachers are duplicating many tasks in isolated classrooms; they are stifled by conformity to an inflexible schedule over which they have no control; their time does not allow for intellectual research; and initiative is lost "in situations where the teacher has no control over variables of time and personnel."⁹ That the teachers cannot capitalize on their differences is an undermining factor in providing optimum educational opportunities to all children. They are refused access to the varied talents possessed by different teachers.

Contributing to the possible loss of initiative is the lack of career opportunities within the classroom. The newly trained teacher is given full responsibility for a group of children just as is the veteran. Their salaries, aside from differentiation based on length of service, are the same. The salaries, responsibilities, and prestige of teachers in self-contained classrooms are not necessarily commensurate with the contributions they make.

These factors seem peculiar to the elementary school. At higher levels of education, for instance, teachers may be designated as heads of departments and receive appropriate compensation. Subject-matter specialization is common and usually required. Teaching in the elementary school is,

⁹M. Delbert Lobbs, Practical Aspects of Team Teaching (San Francisco: Fearon Publishing Co., 1964), p. 3.

according to Polos, quite different from these other levels of learning.

In the elementary school, the idea of the self-contained classroom has prevailed. It was not unusual to call in outside specialists. The general acceptance of the classroom 'cell' did not, however, lend itself to the improvement of instruction. It was this element of isolation with its 'egg-carton' construction, plus the necessity to attract into the profession accomplished teachers and retain them and to redeploy [their] teaching talents, that made the elementary school a fertile ground in which to plant the seeds of team teaching.¹⁰

Growth of Team Teaching

Although it is frequently viewed as a dramatic educational breakthrough, team teaching has its antecedents in several forms of elementary school organization. Among the plans that began with goals similar to those of team teaching are the Platoon School, the Winnetka Plan, the Public Plan, and the Cooperative Group Plan. Of these, the latter, formulated in the 1930's by J. F. Hosis, is probably the most recent prototype. Under this plan, small groups of teachers planned the instruction for a large group of children within two, or at the most, three grade levels; each grade had a

¹⁰Polos, p. 30.

chairman who served in a supervisory capacity in addition to regular teaching functions.¹¹ Thus, while team teaching may be considered new, some of its underlying principles have been applied, to a degree, under various situations in the past.

The term "team teaching" first appeared in the Education Digest in 1957. It can be traced to a movement sponsored by the National Association of Secondary School Principals. In May, 1956, the Executive Committee of the NASSP appointed a commission to guide a study of staff utilization. The Fund for the Advancement of Education supported the study. Schools of all levels, elementary through senior high school, throughout the United States, have been involved in experimental studies and demonstrations under sponsorship of this commission. The purpose of this study was to devise new approaches to some of the problems confronting schools; these include curriculum development, teaching methods, and ways of utilizing space and staff. The program was not meant to foster any particular approaches to the solution of educational problems. All proposals, however, demanded flexibility in school arrangements, in schedules, in staff utilization, and in the instructional organization.¹² Of the variety of projects thus undertaken, one type involved team teaching.

¹¹Hillson and Scribner, p. D & W-5A.

¹²Lobb, p. 5.

J. Lloyd Trump and Dorsey Baynham, Guide to Better Schools, Focus on Change (Chicago: Rand McNally & Co., 1961), p. 23.

At the elementary school level, pioneer work was done in Lexington, Massachusetts, in cooperation with Howard University. The Franklin School, which began a team teaching program in 1957, is the first recorded project. Experimentation was directed by the Harvard University Program of Research and Development--SUPRAD--which has since initiated a number of experimental educational programs.¹³ More detailed information on the project is presented in a later section.

The Franklin School project has been followed by many others throughout the country. Such projects may be observed in at least twenty-four states--among them, Massachusetts, Florida, Illinois, Wisconsin, and California. They are operating in at least 100 communities, in both elementary and secondary schools.¹⁴ In many cases, as in Lexington, they are linked with universities conducting research activities. A significant illustration is the Wisconsin School Improvement Program of the University of Wisconsin. Descriptions of its activities and a variety of other projects appear in a later section of this paper.

Since its inception, then, team teaching has reached the proportions of a national issue. Main sources of information are reports by the projects themselves and

¹³Hillson and Scribner, p. D & W-5A.

¹⁴Ibid., p. DEN-2A.

descriptive articles in educational journals; recently, books based upon these sources and personal participation, have been published. The broad scope of the concept is indicated not only by the many areas of the country in which it is found, but by the school levels at which it is applied. Teaching teams are reported in use in kindergarten through high school. This paper deals primarily with reports of its utilization in the elementary school. Because there are so many different types of programs being developed under its auspices, the term "team teaching" cannot be narrowly defined. However, it is necessary to discuss the term.

Definition and Nature of Team Teaching

A definition of the term "team teaching" must necessarily be kept flexible if it is to remain applicable. It is generally recognized that each school or school system undertaking to develop team teaching has interpreted the term to suit the particular situation and objectives. Perhaps one of the most workable definitions is presented by Trump, who states that

a basic definition is possible--though it is as flexible as the practice itself. Team teaching may be defined as an arrangement whereby two or more teachers, with or without teacher aides, cooperatively plan, instruct and evaluate one or more class groups in an appropriate instructional space and given length of time, so as to take advantage of the special competencies of the team members.¹⁵

¹⁵Trump and Baynham, p. 16. The references to "one or more class groups" makes this definition applicable to the high school as well as the elementary school, in the latter, teaming is based on one group of children.

This definition is quite similar to that formulated by Shaplin, who distinguishes between team teaching and informal cooperative arrangements by noting three common characteristics necessary in the legitimate team teaching situation. First, team teaching attempts "to insure the effectiveness and continuity of these working arrangements by restricting team members from returning at will to an independent classroom and schedule."¹⁶ Second, teaching teams are composed of two or more professional members due to the joint instructional responsibilities assumed in their working relationship. He does state that teams composed of a qualified teacher and an intern teacher may properly be considered teams. Third, a product of assigning a group of students to a teaching team is "the variety which may be introduced in the assignment, scheduling, grouping, and location in space of the students."¹⁷ The absence of one or more of these characteristics implies the absence of a real team teaching program.

In addition to these three characteristics, four others are usually present, though not essential to the definition given. The first is the development of further specialization in teaching; members of teams ideally possess

¹⁶Judson T. Shaplin and Henry F. Olds, Team Teaching (New York: Harper & Row Pub., 1964), p. 10.

¹⁷Ibid., p. 11.

compensatory skills, minimizing individual weaknesses. The second is the improvement of supervisory arrangements in teaching; the less expert teachers grow under guidance from the more expert. The third is the utilization of non-professional aides for increased efficiency. Finally, the expanded use of mechanical aids to teaching is facilitated by regular accessibility and use of the equipment when appropriated to teams.¹⁸ These must not be regarded as being exclusive characteristics of team teaching, although they are common where the program is established.

One source states that in the elementary school, the common element of teaching teams is not the subject matter but the student group, whereby students are supervised by a faculty team. The members of this team assume full responsibility for the total academic program of the students, and for much of their counseling over a period of time, possibly as long as four years.¹⁹

School Management places emphasis on three broad characteristics of team teaching at the elementary level. First, teachers' redeployment exposes them to all the children in the group as they concentrate on their own areas of strength. Second, the regrouping of children is essential and can be based either upon children's ability or upon the

¹⁸Ibid., pp. 18-19.

¹⁹Robert G. Andree, "How to Improve Instruction with Teaching Teams," School Management, IV (November, 1960), pp. 51-54.

objectives of the lesson. Third, scheduling and programming are fitted to the instructional pattern, rather than the latter being forced into the former.²⁰ Inherent in this is flexibility.

Each of the above descriptions refers to the organizational aspect of team teaching. Some authors place greater emphasis on a second important aspect of teams. Lobb, after acknowledging the necessity of assuming a continuing joint responsibility, states that "team teaching is more a spirit and an attitude than a specific design."²¹ Dean and Wither-
spoon write the following:

The heart of the concept of team teaching lies not in details of structure and organization but more in the essential spirit of cooperative planning, constant collaboration, close unity, unrestrained communication, and sincere sharing.²²

Effective group interaction does form the basis for successful team teaching, and because this interaction takes place most intensively within each team, it will be included in a discussion of the team itself.

Anderson integrates the two aspects in his definition of team teaching. He states that the theoretical ideal would

²⁰"How to Introduce Team Teaching in Your Elementary Schools," School Management, V (November, 1961), pp. 58-62.

²¹Lobb, p. 6.

²²Hillson and Soribner, p. D&W-4A.

be the

extensive co-involvement of a number of teachers (three to six) in the entire range of instructive-related functions: planning, actual work with the same children, and evaluation; joint-formulation of broad instructional objectives and determination of immediate teaching goals; periodic opportunity to contribute to plans of members; to observe--extensive intra-team communication.²³

Several factors basic to team teaching programs are suggested. These include: cooperative planning, instruction, and evaluation; recognition and utilization of individual teachers' talents; flexible daily scheduling; student grouping for specific purposes; the use of space and materials appropriate to instructional objectives; and the use of teacher aides.

Objectives and Rationale

As a fundamental procedural change, then, team teaching challenges the assumptions on which the conventional school organization rests. Complete teacher autonomy, an unchanging instructional group size, instruction by one teacher in all or most subject areas, and equal but static teaching positions are no longer considered acceptable. As a procedural change, team teaching rests partially on the assumption that the resulting efficiency and flexibility in the utilization of talents and services of school personnel will facilitate curricular goals.

²³Ibid., p. ASN-2A.

By strategic assignment it seeks to create programs of improved teaching and effective learning, responsive to the range of needs and abilities of children... it seeks to assure an increased degree of educational challenge, opportunity, and enrichment and an improved opportunity for them to move farther and faster when they are alike.²⁴

S. J. Singer states that the objectives of team teaching are directed at those areas of the instructional program receiving inadequate attention in the conventional elementary school:

- 1) to develop creativity, adaptability, responsibility, and habits of inquiry in students
- 2) to make more intelligent use of teachers' specialized talents, training, time, and energy
- 3) to improve the quality of teaching through the in-service nature of the team design
- 4) to provide a program of student grouping which permits instruction to be more effectively geared to individual student ability
- 5) to provide realistic treatment of individual differences to supplement the identifying and diagnosing of these differences
- 6) to provide time and facilities during the school day for teachers to prepare lessons, develop imaginative materials and keep abreast of new developments
- 7) to provide students with group experiences prerequisite to successful citizenship in a democratic society.²⁵

The only justifiable reason for adopting team teaching is the immediate or ultimate improvement of instruction.

²⁴Ibid., pp. D&W-4A, 5A.

²⁵David W. Beggs (ed.), Team Teaching: Bold New Venture (Indianapolis: Unified College Press, Inc., 1964), p. 27.

An underlying belief is that a group of professionals focusing on the same concern will arrive at solutions and methodologies superior to those arrived at if the same individuals worked independently. Through professional interaction and effective use of both time and talent, the general upgrading of capabilities should result in an improvement of instruction. The following is a clear statement in building a rationale:

The keystone in a rationale for team teaching is the belief that the total accomplishment of the group can be greater than the sum of the talents of the individual teachers. It is the hope that the cooperative endeavor, the synergy, will produce results that are greater and more far-reaching than isolated individual efforts.²⁶

²⁶Lobb, p. 8.

CHAPTER II

IMPLEMENTATION OF TEAM TEACHING

Heathers has established the necessity of sound planning when a school or school system is contemplating any type of change. The implementation of team teaching, in particular, requires intensive planning. Essentially it consists of four steps:

- 1) analysis of desired outcomes, detailed and thorough with specific ways of measuring achievement of goals
- 2) examination of program features which can be introduced feasibly and in accordance with desired goals
- 3) establishment of causal relationships between program features and desired outcomes; that is, between such features of team teaching as flexible grouping, large-group instruction, formal team leadership, teacher specialization, use of aides, and instructional goals in each curriculum area
- 4) the consideration of influences on the local situation; that is, all those whom the program encompasses and affects directly or indirectly.¹

Administrator and Faculty

Thus, it is important that goals and operational objectives are agreed upon and will be understood by all those taking part in the program. Each participant's involvement in goal determination increases the probability of achieving desired outcomes. The degree of involvement depends, to a great extent, upon the desire of the members of both the

¹Hillson and Scribner, pp. HTS-2A, 3A.

administrative and teaching staffs to implement the program.

The role of the administrator is of paramount importance, particularly at this phase of the program. It is up to him to involve the participants in the planning stage and to provide common direction for a range of innovations which may be formulated. "The success of implementing team teaching will be directly proportionate to the leadership ability and commitment of the local school administrator."²

Realistic assessment of the faculty is essential. Related to this is the need to consider in-service training, teacher load, teachers' various talents, and the team's role in the school. Although the administrator's responsibility covers a broad area, he must depend upon the teaching staff to carry out the plans made. For this reason, it is of primary importance that the team teaching program not be forced upon the members of this staff. Because reluctance to change from the conventional classroom approach can result in a major obstacle, no teacher should be pressured into participating. This does not necessarily mean that all those who volunteer should be placed on teams.³ Those chosen should have studied the various potentials of the program, and they must understand the extent to which they will have

²Beggs, p. 97.

³Dean Corrigan and Robert Hynes, "Team Teaching: Proceed with Caution!" Clearing House, xxxix (January, 1965), p. 312.

to change from the traditional pattern of teaching.⁴

Once the participants are selected, the administrator must focus on giving sufficient opportunity and support to develop a working rationale for team teaching and to obtain the new skills and methodologies necessary for successful implementation.⁵ The morale of the teachers will be a direct factor in their working relationship and productivity.⁶ Teachers who will constitute the team should be given experience in working closely together prior to actual implementation. The "unlearning" required of the teachers from self-contained classrooms encompasses areas such as decision-making, types of available choices, degree of self-reliance or independence, classroom procedure, and peer scrutiny. The above factors often change to such a great degree that teacher morales may be endangered. Thus, the administrator's continuous leadership and enthusiasm after initiation of the program are of much consequence.

Communication between the team and administrator, usually facilitated by the team leader, aids the process of change. The administrator does not relinquish authority to the team, although the latter takes on certain quasi-administrative functions. He must remain informed at all times in

⁴ Beggs, p. 55.

⁵ Ibid., p. 97.

⁶ Chicago Public Schools, Guidelines for Team Teaching (Chicago: Board of Education of the City of Chicago, 1966), p. 4.

order to insure that team teaching becomes operational and maintains its effectiveness.

The administrator's responsibility for assessment includes not only the teaching staff but the facilities to be involved.

Facilities

The team teaching projects described in this paper should illustrate that, while there are schools specifically designed for this purpose, many are able to carry out an efficient and effective program within schools designed for self containment. Although some advocates claim that architectural changes are essential, there seems to be a consensus that there are actually only three basic facilities needed for an operating team.⁷

A planning area for team members is of primary importance. This may be a specially designed room, a workroom, or an area of the teachers' lounge or library. There should be enough room for teachers and paraprofessionals to carry on different activities, such as discussion, preparation of materials, and research.

A second type of area needed is that for various student groupings. Again, schools employ different means

⁷Beggs, p. 55.

Hillson and Scribner, p. D&W-12A.

Klausmeier et al., p. 30.

of providing the areas necessary for large and small groups. Some have specially designed interiors, while others utilize auditoriums, cafeterias, and movable partitions to reorganize space.

Finally, a resource center is desirable. This is broader in scope than a library; it should contain materials useful to both students and teachers. Here, students can engage in independent study or work with teachers on an individualized basis. Any equipment such as tape recorders and overhead projectors would be available for use. It is desirable if this area is close to the planning area to facilitate immediate use by teachers as well as students. These facilities do not necessarily have to be built into a specially designed school for team teaching. While space is utilized in new ways, the creation of space is not essential. Beggs expresses the following opinion:

Any school which has enough space to operate a traditional school program has enough space to operate a team teaching program. The new program may require a redistribution of activity areas or imply a redeployment of facilities, but it doesn't require either a greater area or contemporary architectural design. The teaching and administrative staff must first identify the instructional needs and then relate them to the existing physical facilities.

Once a team teaching program becomes operative, the space and use needs become

apparent. The contention that facilities are barriers to team teaching is more often an excuse than a reason for not employing the concept.⁸

Although, of course, a building assigned for the program is desirable, the project reports lend support for the minor treatment of this phase of team teaching. No major obstacles to the general program are reported as being caused by improper facilities. This support can be extended to the need for additional resources and equipment. While audiovisual and technical aids are often listed among characteristics common to team teaching programs, they can be used beneficially in a conventional teaching situation. Additional technical aids and machines, as well as resource personnel, are desirable and enriching to any program; however, as Dean Witherspoon state, "Conceivably, the underlying principles of team teaching could be applied without the use of such additional resources."⁹

Initially, team teaching cost money, for training and for the purchase of materials for individualized instruction.¹⁰ This area is another to be considered by the administrator. He must make a realistic assessment of what is available, and of what is essential in carrying out the program.

⁸ Beggs, p. 49.

⁹ Hillson and Scribner, p. D&W-12A.

¹⁰ Corrigan and Hynes, Clearing House, xxxix, p. 312.

Students

Finally, the administrator, as well as the teaching staff, must take into consideration the effect of the program on the students. While the ultimate goal is improved instruction, the way the team teaching program is implemented will be an important factor in its success. Possible difficulties in adjustment on the part of the students must be anticipated, as should be the danger of impersonality. These problems should be minimized by proper planning before and during the actual implementation of the program. Teachers' responsibility for individual learning as well as adequate individualization of instruction is essential to a program based on children's needs, rather than on

simple manipulation of time and people;... The program for inaugurating team teaching should not only anticipate many of the more difficult adjustments in adapting personnel, procedures and facilities to team teaching, but it should build the concepts upon which the new instructional approach will be based.¹¹

¹¹Beggs, p. 98.

CHAPTER III

STRUCTURAL ASPECTS AND PERSONNEL ROLES

Total Elementary School Organization

It has been established that team teaching is largely an organizational concept. Most educators distinguish between several types of elementary school organization. Goodlad describes the essential difference between team teaching and the graded, multi-graded, and non-graded organizations of the elementary school. Team teaching, or the assignment of teachers and students to classes, is a way of organizing the school on a horizontal basis, while the other types of organization are essentially vertical, moving students upward through the school. Despite the implied autonomy of each type of organization, he states that "the horizontal flexibility of cooperative teaching and vertical flexibility of nongrading have a certain compatibility."¹

Anderson makes a further statement concerning the relationship between horizontal and vertical organization:

Team teaching and nongradedness in combinations, especially where multi-age groupings are also employed, appear to represent an ideal or ultimate form of school organization.²

The four basic combinations formulated by Anderson are in descending order from a theoretical ideal to the least

¹Hillson and Scribner, p. GDL-4A.

²Ibid., p. ASN-4A.

desirable pattern:

- 1) non-graded vertical organization (continuous progress)
team teaching horizontal organization
multi-age or inter-age grouping
- 2) non-graded vertical organization
team teaching horizontal organization
unit age grouping
- 3) graded vertical organization (promotion/failure)
team teaching horizontal organization
multi-age grouping
- 4) graded vertical organization
team teaching horizontal organization
unit age grouping³

FIGURE 1

Four Organizational Combinations

NG	NG	G	G
TT	TT	TT	TT
MA	UA	MA	DA
(1)	(2)	(3)	(4)

Vertical and Horizontal Team Structures

It can be said that team teaching and degrees of non-gradedness supplement and complement each other. Together then, they present a scheme of elementary school organization.⁴ When speaking of team teaching, the team takes on both vertical and horizontal structural elements. Vertical elements are

³ Ibid.

⁴ John I. Goodlad, "News and Comment," Elementary School Journal, LIX (October, 1958), p. 7.

those related to students' progression upward through the school. Team structures may be designed on an intra-grade basis including teachers, students, and curriculum normally assigned to one grade level. Another possibility is an inter-grade arrangement including persons and curriculum of two or more grade levels. In this arrangement, grade level identity is retained. A third arrangement is the non-graded pattern allowing children to progress in a relatively unbroken manner. This is the pattern which Anderson sees as the ideal one. Figure 2 illustrates how a school can move from an intra- or inter-grade arrangement to a completely non-graded arrangement.

The horizontal dimension of team structure includes way of assigning teachers, students, and curriculum according to subjects, functions, or student groupings. A subject-based team structure can be formed for one subject area (single discipline) or a combination of two or more subject areas (inter-discipline); in the latter the subject areas retain their identities although integrated by the team. In addition to subject-based teams, an inter-functional team pattern combines teaching with other classifications such as guidance, library, and health services. A third group of horizontal patterns is based on grouping of students by ability, interests, needs, or other factors.⁵ Because it

⁵ Lobb, pp. 36-7.

FIGURE 2

Team Teaching and Degrees of Nongradedness

LDR-team leader

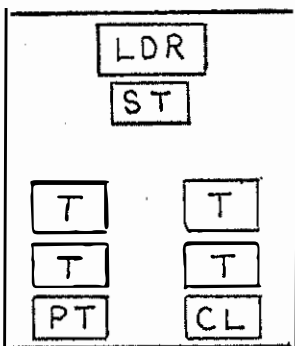
ST- senior teacher .

T- teacher

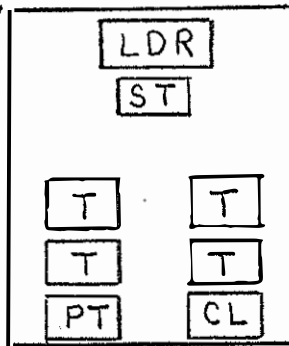
PT-practice teacher(or intern)

CL-clerical assistant

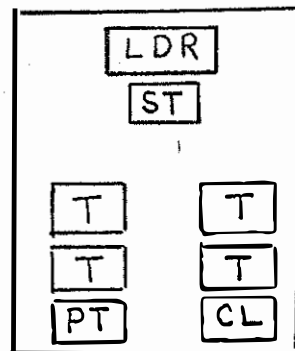
K-1-2



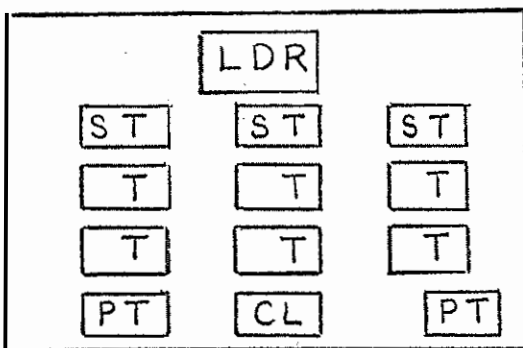
3-4



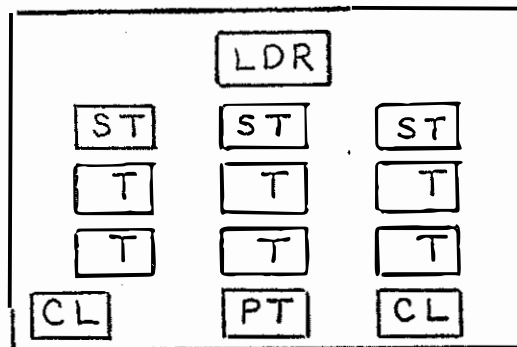
5-6



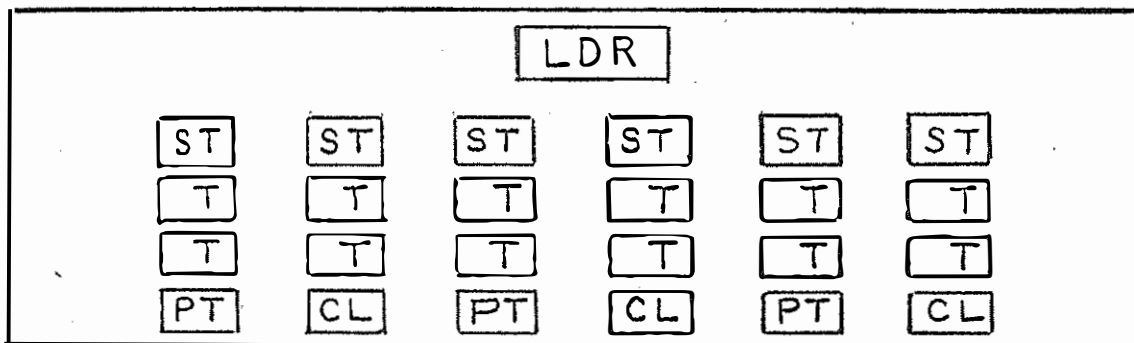
nongraded primary



nongraded intermediate



nongraded elementary school



forms the basis for a great majority of team teaching structures in the elementary school, grouping will be discussed in detail at a further point in this paper. The horizontal elements are not mutually exclusive, but can be combined into almost unlimited variations.

Representative combinations may indicate the scope of those actually in existence in elementary schools. Each model is described in terms of the traditional organizational pattern of the self-contained classroom.

Three basic patterns are based on the vertical dimension of team organization, or that of grade levels:

- 1) The first is a team organized on one grade level, involving all classes of that grade. In an extremely large school, it might be necessary to form more than one team per grade. (Figure 3-A)
- 2) The second is a team consisting of one class from each grade level within the school. At this extreme, as many teams are formed as there are vertical arrangements of classes. (Figure 3-B)
- 3) The third model involves teaming of two or three grade levels, including all classes of each of these grades. This stands at the midpoint between the first two extremes. The teachers are responsible for a group of students over an extended period of time, usually two to four years. (Figure 3-C)

Three other patterns are based on a horizontal dimension of team organization, or that of content:

- 1) The team may be based on one subject taught to students of one grade level. As many teams

- can be formed as there are major subject areas in the curriculum. (Figure 4-A)
- 2) The team can be based on one content area taught to students from all grade levels in the elementary school. As many teams can be formed as there are content areas appropriate for all grade levels. This represents the opposite extreme from the above pattern. (Figure 4-B)
 - 3) The third pattern stands between the extremes. The team is based on one subject or skill area taught to students of two or three grade levels. As many teams can be formed as there are major subject areas appropriate for those grades. (Figure 4-C)⁶

Those models presented under the vertical dimension of team teaching are those most often initiated in the elementary school. The first is common when two or three teachers work as a team at their one grade level. The third is the most common pattern existing at present. It has been shown how this pattern can lead to non-gradedness. Those under the horizontal dimension which are based on subject areas are most commonly initiated at upper levels in the elementary school. These are similar in many ways to departmentalization and can lead to such organization unless sufficient teacher interaction continues.

Each of these team patterns can be modified by the internal team structure; that is, categories of teachers and

⁶John A. Brownell and Harris A. Taylor, "Theoretical Perspectives for Teaching Teams," Phi Delta Kappan, XLIII (January, 1962), p. 152.
Chicago Public Schools, Guidelines..., pp. 23-5.

FIGURE 3
Teams Based on Vertical Organization

3-A

Class	Grades							
	1	2	3	4	5	6	7	8
A								
B								
C								

3-B

Class	Grades							
	1	2	3	4	5	6	7	8
A								
B								
C								

3-C

Class	Grades							
	1	2	3	4	5	6	7	8
A								
B								
C								

FIGURE 4
Teams Based on Horizontal Organization

4-A

Class	Grade 3		
	A	B	C
science			
social studies			

4-B

	Grades							
	1	2	3	4	5	6	7	8
social studies								
science								

4-C

	Grades							
	1	2	3	4	5	6	7	8
social studies								
science								

auxiliary personnel may be varied by redefinition, inclusion, or exclusion. Inter-disciplinary team combinations and the elimination of arbitrary grade levels can be accomplished to varying degrees and at various levels of complexity.

Team Organization and Leadership

As is implied by the definition of team teaching, a team may consist of as few as two members, each of whom is a full-time certified teacher. A large team may consist of two or more certified teachers and one or more uncertified aides. Still larger is the team consisting of certified teachers, non-certified aides, and specialists assisting on occasion. Trump illustrates the variety of team sizes in his description of a country-wide staff utilization project in which most teams numbered four members, but several numbered more than four and some numbered only two.⁷

Once the composition of the team is determined, a decision must be made concerning the actual team structure; that is, the organization of the working relationships among the teachers must be defined. This is essential, as the definition implies formal commitment and acceptance of responsibility on the part of each member. Currently there are two basic kinds of teaching teams in operation, representing the two extremes of formal organization and variations between

⁷ Trump and Baynham, p. 86.

these extremes.

The cooperative or associative team is one in which each member is considered an equal in a partnership. On such a team, there is no formal designation of leader or coordinator; leadership resides either outside the team, possibly with the principal, or is meant to emerge out of the group process and rotate among team members.⁸ Emergence of natural leaders would stem from their experience, managerial ability, depth of knowledge in a subject field or skill in a particular technique, or sheer force of personality.⁹ Each teacher has equivalent responsibilities in several areas.

At the lowest organizational level, cooperative teams would consist of teachers who trade or combine classes for brief periods, on a casual and informal basis. These teams become more formally organized when teachers are assigned joint instructional responsibility for certain definitely scheduled periods of time. At the highest level the members of the cooperative or associative team are assigned equal responsibility for the instruction of a group of students most, if not all of the time. This level is "a fairly common arrangement which can be found in about fifty schools in New York City and in schools all across the country to California, where many

⁸ Shaplin and Olds, p. 10.

⁹ Bair and Woodward, p. 62.

such programs are in operation.¹⁰

The second main kind of teaching team is organized on a hierarchical basis. On such a team, several formal levels of responsibility are established, with prescribed statuses and roles. Leadership in the form of quasi-administration for the group is provided by an appointed or elected team leader. Each teacher has responsibilities within well-defined limits. Variations in assignments are based on the differences in teacher competencies. Team leaders and specialists may spend more time in preparation of materials, curriculum development, and evaluation. They would then spend fewer hours a week in direct student contact than would those teachers who do less research and related activity.

As with cooperative teams, hierarchical teams have varying degrees of complexity. A simple form would consist of a number of regular teachers and an experienced teacher as leader, thus forming two levels of responsibility. A third level is formed by the inclusion of the intern and/or student teacher. The team becomes more complex as professional and non-professional personnel are added to the simple form described above. On such a team different levels of responsibility are designated to the team leader, the regular certified teachers, teaching interns, and instructional aides. At this

¹⁰ Ibid.

level of sophistication, greater emphasis may be placed on non-gradedness, but, the combination of two or three grade levels is more common.

Two more hierarchical levels are established when senior teachers are distinguished from regular certified teachers, and when clerical aides are appointed in addition to regular teacher aides. A final degree of complexity is reached when teacher specialists are distinguished from both regular teachers and senior teachers. A team of this complexity usually employs an auxiliary, or part-time teacher who substitutes for team members regularly and attends team meetings.¹¹

The enumeration of the degrees of complexity which are possible illustrates a varying number of levels of authority descending from the team leader to the clerk. It is assumed that the greater the size of the team, the more complex it must be. The inclusion of additional personnel implies the establishment of well-defined roles and levels of authority.

An aspect not encountered in the cooperative team is that of salary scales based not only upon quantitative experience, but upon teacher assignments. Trump predicted that

¹¹John A. Brownell (ed.), Claremont Team Teaching Program, Annual Report (Claremont, Calif.: Claremont Graduate School, 1962), pp. 2-4.

the highest salaries would be paid to "team leaders and teacher specialists, those who are most skilled in small-group discussion, large-group instruction, and in stimulating independent study."¹² This is not yet widespread, although the trend seems to be toward formal assignment of leadership roles within the team.

Discussions of the Cooperative and Hierarchical Team Structures

The relative merits of the two team structures have been the subject of much discussion. Some of the views favoring each pattern of organization will be presented here.

There are two basic assumptions underlying the hierarchical structure which are put forth by Polos. The first is that this structure could be used to provide in each school a feasible, realistic merit system. The second is that it could provide a "hierarchy of professional attainment."¹³ The emphasis in both of these assumptions is on a career line not existing in the traditional school organizational pattern or the cooperative team structure. Thus, honor and prestige would accompany those roles requiring greater competencies.

This career emphasis is further supported by this statement:

¹²Trump and Baynham, p. 48.

¹³Polos, p. 26.

Below the college level, all teachers are supposed to be equally replaceable parts.... A teacher is supposed to make progress in the profession not through promotions in rank with corresponding salary differentials, but simply by staying on the job.... Monetary incentives are not the answer to any personnel problems, but to reject them as irrelevant is to doubt the basic appeal of a capitalistic society.¹⁴

Administrative efficiency is a third assumption on which the hierarchical structure is based:

Whenever the number of teachers in a team is greater than two, the need increases to have a designated team leader to provide the administrative leadership necessary for a smooth operation.¹⁵

Thus, as has been stated, responsibility for group action would be attached to one person who in turn would be in a position to establish good working relationships among the staff. His activity would increase the flow of communication within the school, particularly that between the principal and the regular teachers.

A fourth assumption is that the hierarchical team offers superior guidance and instruction to new and inexperienced teachers, particularly to interns and student teachers. Experienced teachers give supervision directly and indirectly, by example.

¹⁴ Phillip Lambert, William Goodwin, and William Weisma, "A Study of the Elementary-School Teaching Team," Elementary School Journal, LXVI (October, 1965), p. 29.

¹⁵ John A. Bahner, "Team Teaching in the Elementary School," Education, LXXXV (February, 1965), p. 341.

The team, if properly structured..., provides a highly organized framework within which a new teacher can continue to learn the mysteries of the art of teaching. Here the neophyte finds some form of security and flexibility, an opportunity to learn to share in planning, time to do sensible planning, observe the method of experienced colleagues, learn how to avoid the pitfalls of inexperienced teaching, receive valuable advice on the matters of discipline, grading, the handling of large and small groups, and how to be a 'team' member--in short the team concept helps to build a foundation upon which the beginning teacher can stand firmly.¹⁶

Generally, the advantages of the team hierarchy structure are seen as being an increase in productivity, the addition of effective non-professional people to school staffs, lower turnover rate of team leaders into purely administrative or supervisory positions, prestige of the profession (which would attract superior college graduates), and better staff morale.¹⁷

Anderson presents conclusions drawn from studies made of hierarchical teams:

- 1) The existing corps of teachers finds it difficult to accept hierarchy before having direct experience with it.
- 2) Veteran teachers who join hierarchical teams usually develop positive attitudes toward hierarchy, though some do not.
- 3) Young teachers who begin their careers in hierarchical teams find it to be both helpful and desirable.
- 4) There is a strong relationship between the competence of the leader and the team members' feelings about the hierarchy.

¹⁶Polos, p. 106.

¹⁷Bahner, Education, LXXXV, p. 341.

- 5) Pupils, especially at the elementary level, tend to value and approve of all of the members of the team regardless of their role.
- 6) Competition for leadership roles does become evident in some teams, but the effect of this seems to be generally constructive rather than destructive.¹⁸

Polos emphasizes the continuity in the over-all program provided by the hierarchical team structure and remarks:

It is most interesting to note that teams which have been successful have...used the "team hierarchy" approach. Schools which have left the leadership to drift in the amorphous cloud of group dynamics have been forced to admit later that friction developed during team operations.¹⁹

This is where the main objection to the cooperative structure seems to lie. The lack of a fixed line of responsibility exists as a result of the emphasis on natural leadership. When natural leaders emerge, they lack decision-making authority. Thus, decisions tend to be made by compromise, and these may be less innovative and of lower quality than those made directly by a leader.²⁰

The intensive interaction inherent in the cooperative team structure requires that each team member submit finally to the decisions made by the majority, although individually he may disagree with them. This is required in the hierarchical structure as well. Polos states that, if in the cooperative team,

¹⁸Shaplin and Olds, p. 191.

¹⁹Polos, p. 17.

²⁰Bair and Woodward, pp. 29, 62.

there is the concept of "we" rather than "I" and the members of this leaderless team accept this, then the associative [cooperative] type team could be fairly successful; however, this leaves unsettled the matter of coordination and team responsibility.²¹

Advocates of the cooperative team structure feel that, in general, a team is more productive when the members are of equal rank and status. They point out that on such a team each member's full interest and effort will go into the teaching enterprise. Ploghoft implies that this can not be found in the hierarchical team; because it requires a team leader and "teaching members who are less competent (that is why they are paid less) than the leader, the administrators must intentionally recruit some inadequate teachers or arbitrarily classify some as less competent than the leader."²² Other warnings issued against the hierarchical structure point out the chances of divisions building up within the team, abdication of responsibility by some members, and the creation of artificial barriers between fellow workers.

Finley prefers the "change of leadership" within the team and the absence of the line and staff appearance in an elementary school."²³ Corrigan and Hynes, speaking of initiating a team teaching program in the elementary school, express

²¹Polos, p. 17.

²²Milton E. Ploghoft, "Another Look at Team Teaching," Clearing House, xxxvi (December, 1961), p. 220.

²³Beggs, p. 58.

the opinion that a cooperative team program, with all members equal in status and authority, would generally be best. "It seems to offer more advantages and fewer disadvantages than the hierarchical form of operation."²⁴

It is evident from these views that support can easily be found for both the hierarchical structure and the cooperative structure.²⁵ There is no one form of organization which has proved to be best for every school. The team structure must be in harmony with the school philosophy, organization, size, available personnel, areas to be taught, and objectives to be achieved. If the school organization as a whole is clearly and tightly structured, with centralized authority, team hierarchy may be accepted as most appropriate. However, if the school organization is informal, with decentralized authority, the team may operate in a more casual manner within a cooperative structure. Compatibility with the school setting is a primary factor determining structure.

Before personnel roles are discussed in detail, it may be helpful to see them in context; that is, within the structures which have been discussed. The following charts should illustrate the degrees of organizational complexity

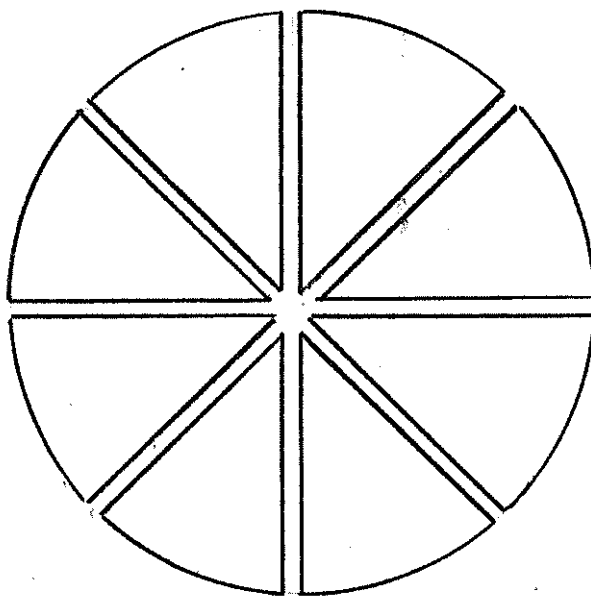
²⁴Corrigan and Hynes, Clearing House, XXXIX, p. 312.

²⁵Lambert, Goodwin, and Wiersma, Elementary School Journal, LXVI, p. 29, lists sources in which arguments for each type of structure can be found.

FIGURE 5

Leadership Model: Cooperative Team

Teachers remain autonomous while working in a voluntary federation.



Teachers are on an equalitarian basis, but leadership is exercised by each teacher on a rotating arrangement.

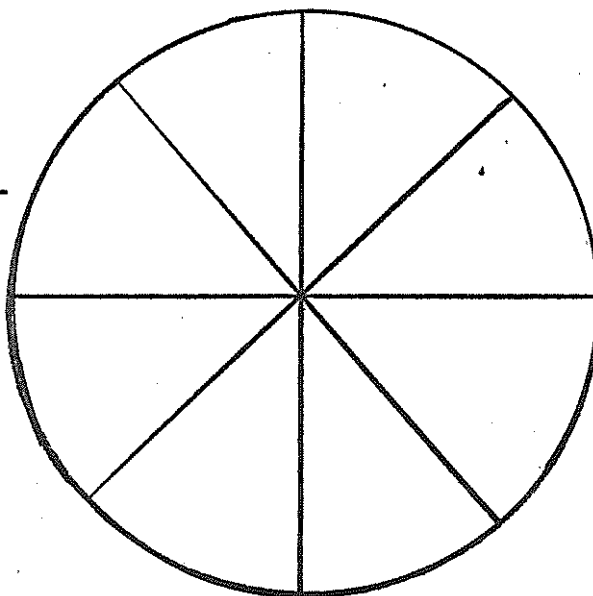


FIGURE 6

Leadership Model: Simple Hierarchical Team

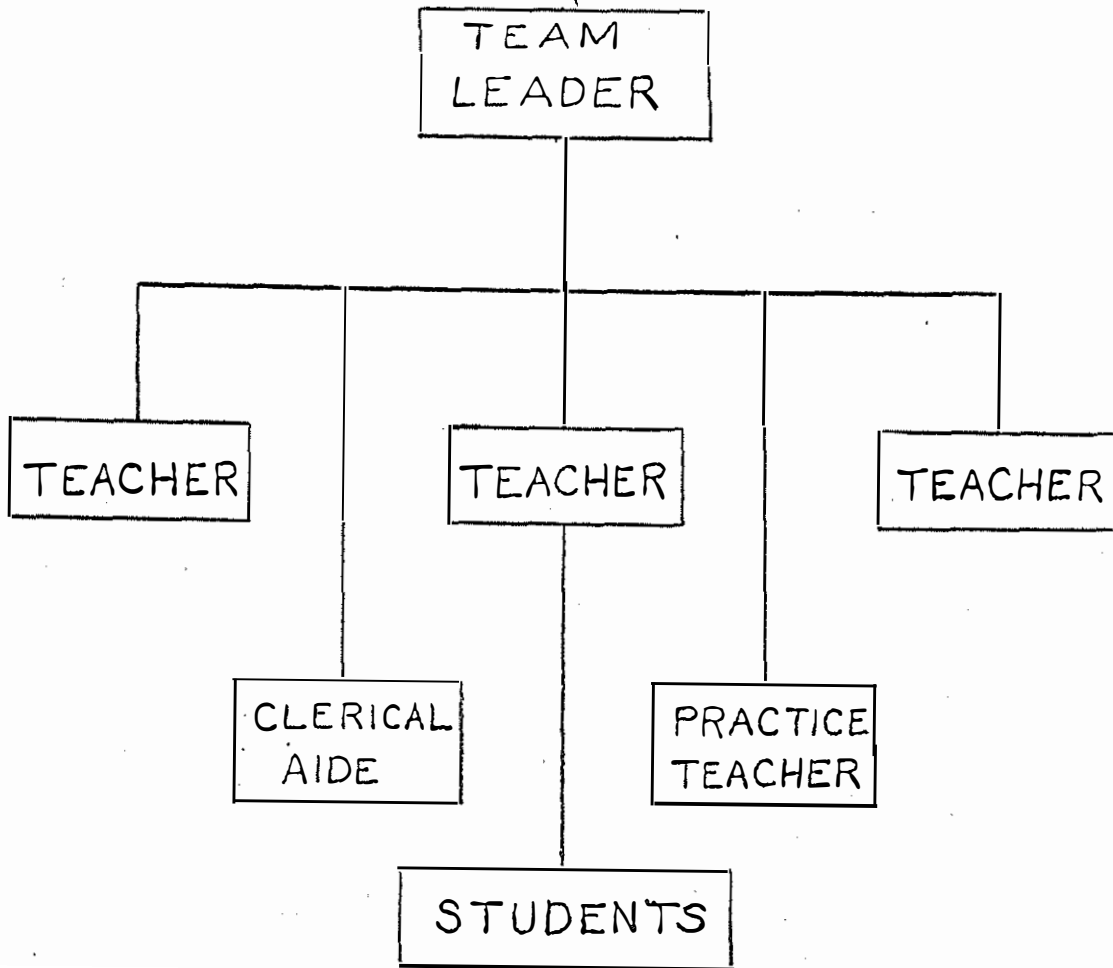
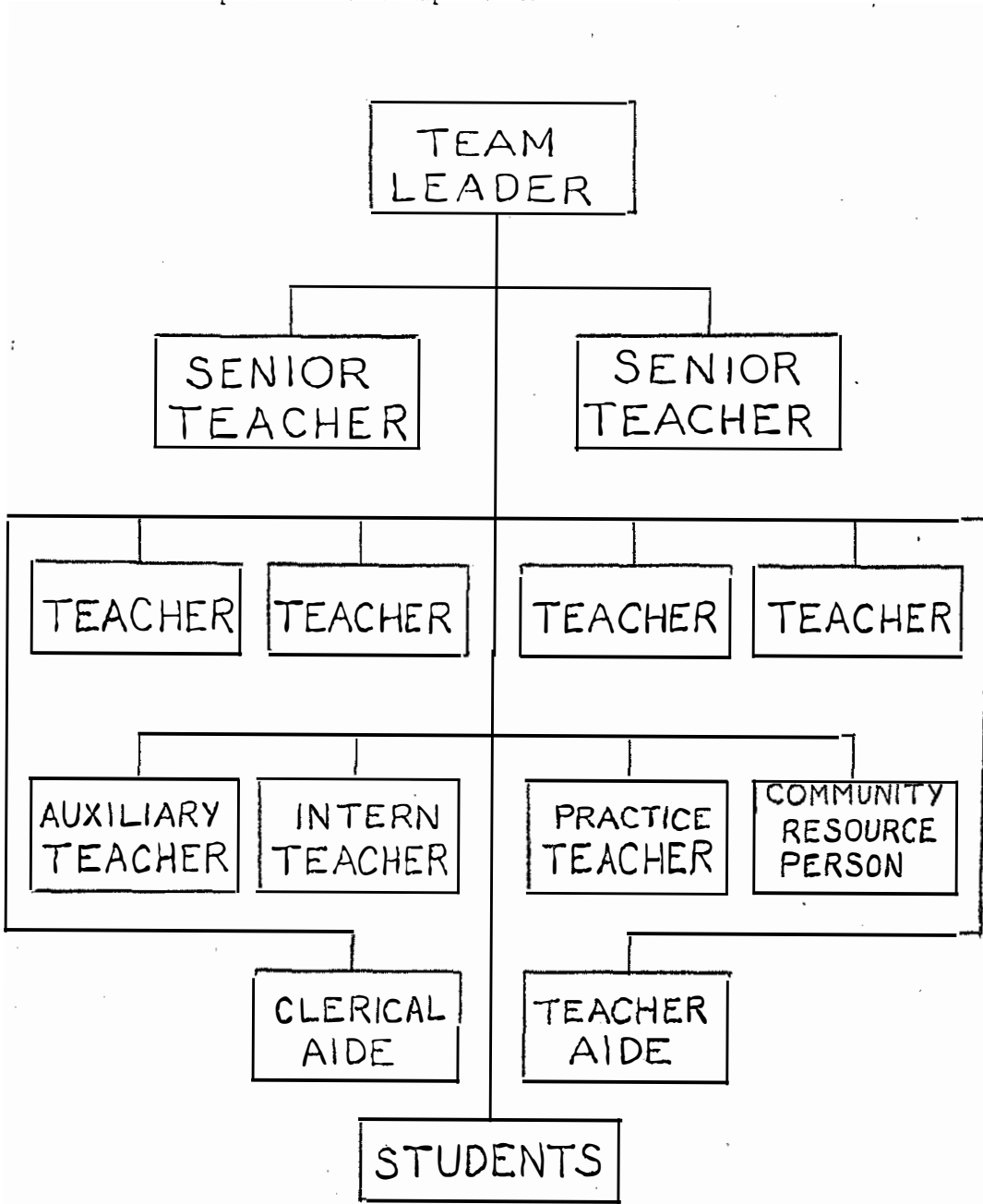
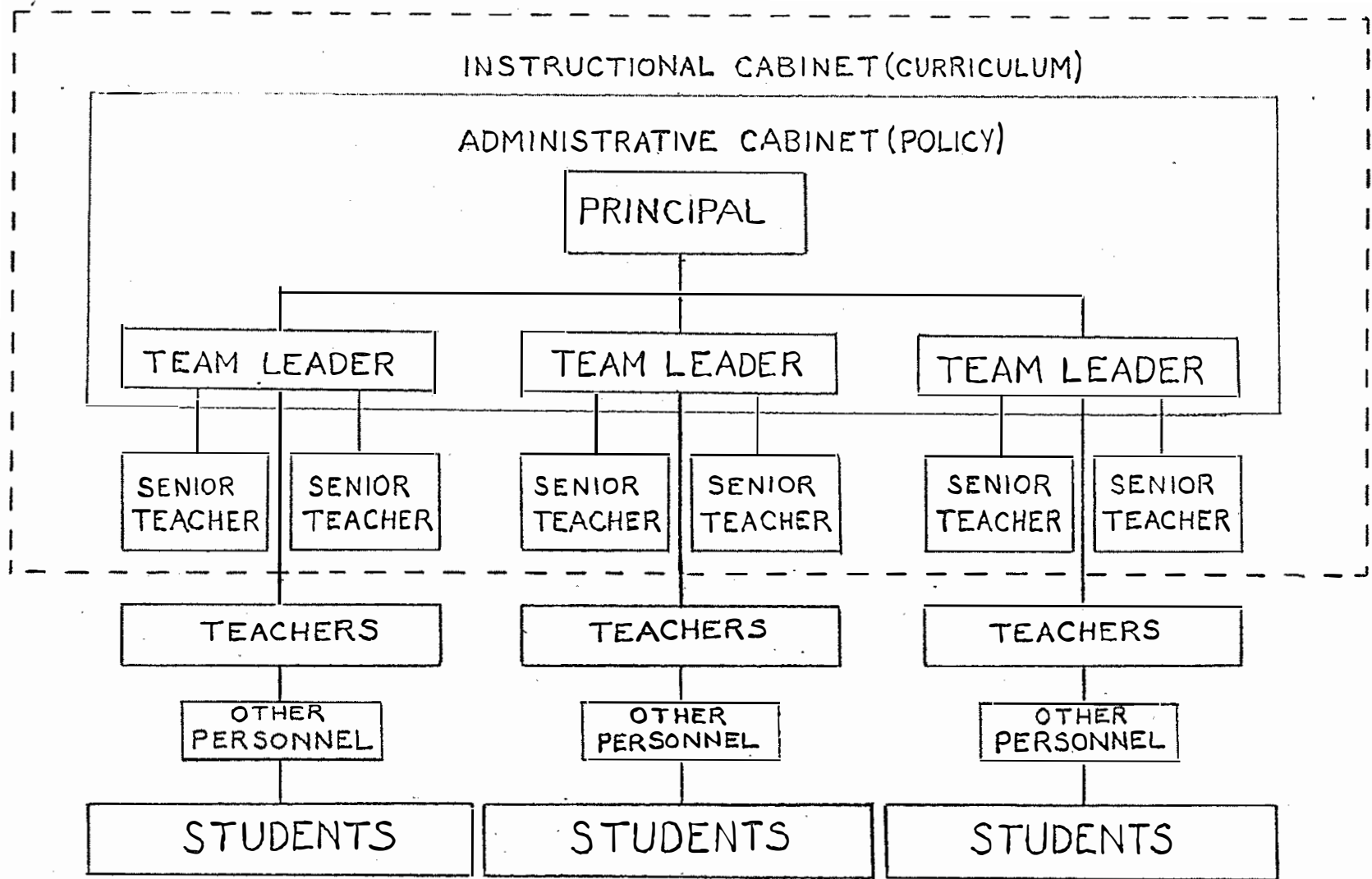


FIGURE 7

Leadership Model: Complex Hierarchical Team



Total Organizational Model



and the resultant divisions of responsibility, both within the team and the entire school.²⁶

Personnel Involved in Team Teaching

Principal

It is obvious that the traditional role of the principal as administrator will become a new and more active one in the team teaching program. This may constitute one of the most important role changes made within the school.

As in every school, he is ultimately responsible for the success and failure of all activities within it. The principal, at the top of the building hierarchy, is the major administrator, coordinator, and supervisor for the implementation of the unified curriculum designed to meet the needs of each child in his school. He is a true educational leader and a personnel manager in the best sense of each term.²⁷

These two added characteristics of his role are apparent in his intensive interaction with the staff members. He works with professionals and non-professionals, many of whom are also engaged in redefining their roles in the school. Working closely with them, he is expected to gain knowledge of their competencies and limitations.

Specifically, the principal works with the teaching teams and team leaders, who form the second leadership

²⁶ Models are adapted from the following: Brownell and Taylor, Phi Delta Kappan, XLIII, pp. 150-57; Chicago Public Schools, Guidelines..., pp. 19-25.

²⁷ Bair and Woodward, p. 66.

structure within the school. One source emphasizes the new dimension in the leadership role taken on by the principal when he exercises preventive supervision in team planning sessions in which he participates. In many instances it is he who leads in "initiating, stimulating, motivating, researching, and evaluating. He brings to the staff's attention new ideas and develops an awareness of the need to select those most pertinent to the local program."²⁸

His role requires that basic changes be made in the way he spends his time and energy. Because he must be involved with the actual teaching process taking place, he must spend a greater part of his time in the classroom. He must spend time researching new ideas, techniques, and material, becoming an additional resource person for the team.²⁹ Some of his time is freed for these pursuits by the teams themselves, in that they take on the responsibility for many scheduling functions formerly handled by him.

The role of the administrator is both succinct and vital to the team teaching program. In addition to active leadership in the area of ideas, his greatest contribution is in providing a climate for healthy democratic growth, in which ideas can be expressed, plans integrated and evaluation geared to producing a workable design.³⁰

²⁸Chicago Public Schools, Guidelines..., p. 7.

²⁹Ibid., p. 12.

³⁰Beggs, p. 167.

It was stated that the principal is ultimately responsible for successes and failures occurring in the school. This implies that his influence permeates the atmosphere of the entire school program. "The administrator's enthusiasm may not guarantee success, but his lack of it may very well guarantee failure."³¹ Here, his ability as personnel manager is of paramount importance.

Team Leader

The team leader is the recognized head of the team. His role depends upon the philosophy of the school and the members of the team. He may serve primarily as a liason between the team and the administration, but generally he is considered the "key to the team operation."³²

In a major sense he is the person who is at a point where the goals of education, the teaching staff, the curriculum, and the teaching strategy converge. He has major responsibility for the planning, teaching, and evaluating cycle of his team. The team leader is at the apex of the team hierarchy and is an experienced, mature master teacher with the ability and willingness to assume major responsibility for administering, coordinating, and supervising the work and activities of the teachers, pupils and aides of his team.³³

³¹Chicago Public Schools, Guidelines..., p. 7.

³²Robert Marsh, "New Technique Has Advantages for Both Students and Teachers," Illinois Education, L (November, 1961), p. 111.

³³Bair and Woodward, p. 68.

Ordinarily the leader is a certified teacher with a master's degree and a number of years of teaching experience. Lobb emphasizes that the designation of the team leader should not be dependent on any specific teaching function.³⁴ That is, the leader should not be appointed for the purpose of lecturing to large groups, writing lesson plans, preparing visual materials, or working with seminar groups. These activities are participated in by all team members, and the leader has the responsibility of delegating the work to various teachers. He is responsible primarily for insuring that there is no overlapping of assignments. The leader spends part of his time teaching; however, his supervisory duties are extensive, particularly in planning and evaluation.

Like the principal, the team leader is in a vital position as a personnel manager. He works closely with both the principal and the members of his team. Shaplin recommends that the team leader possess, in addition to the master's degree, training in supervision and human relations or educational sociology. He would have had to demonstrate his ability to work well with teachers in a leadership role.³⁵

Senior Teacher

The senior teacher is an experienced master teacher

³⁴Lobb, p. 17.

³⁵Shaplin and Olds, p. 196.

with a content specialization in at least one area. He exercises coordinating and supervisory leadership for the team in the area or areas in which he has special interest or skill. His leadership takes the form of development of curriculum materials, instructional units, lesson plans, evaluation of procedures and objectives. The senior teacher aids in organization of groups, identification of good teaching techniques, and supervision and training of inexperienced personnel. He teaches in instructional areas other than his own under the supervision of the team leader and other senior teachers. He is generally equipped to do a superior job in instruction.³⁶

Teacher Specialist

The teacher specialist is a regular certified professional who has a high degree of competence in a particular area. He teaches in all areas as do the other teachers on the team, but he takes a leadership role in long- and short-range planning in his subject area. The specialist is not recognized as such only when he demonstrates skill in a subject area or one aspect of a subject area. He may be considered as a leader in working with groups of a particular size, or he may have extensive experience in the use of certain teaching techniques. His leadership in these aspects of teaching qualifies him as a specialist.

³⁶Bair and Woodward, p. 70.
Lobb, p. 17.

Certified Teacher

The regular certified teachers possess general qualifications for their professional tasks. The regular teachers constitute the bulk of the teaching force.³⁷ Each regular teacher teaches most subjects to pupils in large and small groups, and works individually with them. He plans and evaluates with other team members the units and lessons to be taught after objectives have been formulated. However, he usually retains a degree of classroom autonomy in that, within a jointly established framework, he uses those techniques most successful for him.³⁸ Other aspects of his role include the identification of unique needs of pupils and active communication with parents. Generally, he is expected to cooperate with team leaders, senior teachers and other regular teachers in planning, teaching, and evaluating. Fink cites those qualities of teachers which are especially crucial for training purposes as being:

- 1) readiness to listen to the ideas of others
- 2) readiness to try new ideas
- 3) ability to change preconceived ideas
- 4) ability to accept criticism from others
- 5) ability to get his ideas across to others
- 6) ability to assume leadership effectively
- 7) a strong commitment to developing a successful team program

³⁷Ibid.

³⁸Bair and Woodward, p. 73.

8) an attitude favoring inquiry.³⁹

Intern Teacher

The intern is a candidate for a teacher certificate doing full-time supervised teaching in the school. He is generally a college graduate completing additional requirements for acceptance into the profession. The intern is given supervision and training by the professional members of the team, more specifically by a senior teacher working with a college or university supervisor.

Student Teacher

The student teacher is a college student assigned to the school by the teacher education department of his college. He is to observe part of the time; the rest of his time is spent doing directed teaching under supervision of a master teacher. He does not have a full teaching assignment as does the intern teacher.⁴⁰

Teacher Aide

The teacher aide is a paraprofessional who has had academic training but does not hold a teaching certificate

³⁹David R. Fink, Jr., "The Selection and Training of Teachers for Teams," National Elementary Teacher, XLIV (January, 1966), p. 57.

⁴⁰Brownell and Taylor, Phi Delta Kappan, XLIII, p. 150.

and is not a candidate for one. He is usually a mature person capable of carrying out assignments under the direction of professionals. Because he enjoys direct contact with children, most of his activities consist of supervising or working with children in non-instructional situations. Some of the duties which are assigned to him are the following:

- 1) supervising bus arrivals and departures, recess and lunch periods;
- 2) operating mechanical aids to instruction;
- 3) preparing tests and materials, and assignments for absentees;
- 4) gathering information;
- 5) assisting teachers in other tasks, in or out of the classroom.

Specific tasks are defined by the particular demands of each team. In general, their tasks are those which fall below the professional teacher levels but above the clerical level.⁴¹

Clerical Aide

The clerical aide does not necessarily have any professional preparation. He performs the routine clerical duties associated with teaching. These tasks are referred to by one source as stationery--stationary duties performed on paper at a fixed station.⁴² In some cases a team secretary is distinguished from a clerical aide if he has a good background in

⁴¹Lobb, p. 18.
Shaplin and Olds, p. 196.
Trump and Baynham, p. 34.

⁴²Bair and Woodward, p. 78.

business education and has become proficient in such office skills as shorthand. In more complex teams the team secretary receives telephone calls and visitors, arrange for use of supplies and equipment, and supervises student assistants.

Staff Specialists

Staff specialists may be full-time persons who serve several schools as they are needed. This purpose is to supplement the professional teachers' work in such areas as guidance, research, health, reading, instruction of exceptional children, audio-visual materials, and curriculum development. The terms of their employment depend on local circumstances such as school size, needs of students, and special talents of teachers.⁴³

Supportive Personnel

This term applies to all members of the school staff, other than those on the team, who have some responsibility to and interest in the team or serve it in some way. In this group would be school nurses, counselors, and librarians, along with the school administrative and secretarial staff. The librarian in particular can be of great assistance to the teams.

⁴³Trump and Baynham, p. 33.

Community Resource Personnel

The community consultant is a layman regularly associated with the team, especially functional in aiding planning and preparation. He aids in locating and securing resources and special information for the team. In general, he must have interest in the school, vocational competence, and access to resources. "A community consultant also gives dimension and perspective to the educational process."⁴⁴

The personnel roles described can be categorized into three main groups. The professional members of the team are the team leader, the senior teacher, the teacher specialist, and the regular certified teacher. The second group is comprised of auxiliary personnel, or non-teachers assigned to the team. They are the intern, the student teacher, the teacher aide and the clerical aide. The last group are the resource personnel, those non-team members associated with the team for special purposes. These persons are the staff specialists, supportive personnel, and community resource personnel.

The selection by a teaching team of the type of auxiliary personnel should be quite specific to their team:

One situation may call for a paraprofessional, instructional assistant, or intern; another, for a secretary, clerk or teacher aide; still another may call for a community consultant. Combinations

⁴⁴Lobb, p. 19.

of any or all of these may be desirable. The utilization of resource personnel will depend to a considerable extent on the relationship between the school and community.⁴⁵

Trump and Baynham, in writing about the school of the future, made certain pertinent predictions:

Staff members will be selected for particular competencies and for specific tasks. Together with professional teachers, the assistants will create a new staffing pattern for schools. Staff specialists, community consultants, general aides, clerks, and instruction assistants, along with professional teachers, will comprise the staff in relation to the total need of the students. The schools of the future will employ more adults to work with students but fewer adults will need to be professional teachers.⁴⁶

The creation of the roles discussed illustrates the complex nature of team teaching when interpreted as a complete change in school organization. Team teaching creates new situations as well as new personnel roles.

⁴⁵Ibid., p. 24.

⁴⁶Trump and Baynham, p. 33.

CHAPTER IV
INTRATEAM RESPONSIBILITIES

Types of Decisions

Grannis sees the very nature of teaching teams as the major determiner of the types of decisions with which the team is confronted. He defines team teaching as

...a structure of givens and alternatives, deliberately fashioned to create certain options that require decisions and also entailing other decisions.... The more complex organization of team teaching, whether in one form or another, results from the desire to give teachers more options than they would have if they operated alone...¹

The decisions occasioned by team teaching are often unfamiliar in degree, if not in kind, to the teacher operating within the confines of the self-contained classroom. The teacher in the latter situation may unwittingly make many decisions or surrender them to the administration. In the team teaching situation these decisions must be confronted. Once made, they must be justified before they are executed. Thus, the teacher on a team not only has a broader range of alternatives, but must rationalize his position to his colleagues.

On the other hand, there are some decisions normally encountered by the teacher in the self-contained classroom

¹Shaplin and Olds, pp. 124-25.

which may, in a teaching team, be delegated to a colleague or colleagues. Thus, in general, decisions are redistributed according to specialization and differentiation of roles. Determining who makes what decisions "focuses on the problem of exploiting and maintaining the efficiency of a team's operations."² Such factors as each teacher's interests and competencies must be taken into account. Job descriptions can be prepared for each member of the team in relation to content areas, activities, and group size and composition. Care should be taken not to overspecialize and lose flexibility in the team.³

It is important not only to differentiate between the roles of team members, but to establish a rhythm of long and short-range decisions.

...Removing major decisions to a higher level of policy planning would control the alternatives a team must deal with at a given time. Similarly it is essential to displace those decisions which are more contingent upon the immediate circumstances of the learning situation downward in the hierarchy [assuming there is a hierarchy] to a level closer to the actual circumstances...⁴

As has been established, the range of decisions is broad, involving not only those for determining instruction,

²Ibid., p. 136.

³Lobb, p. 35.

⁴Shaplin and Olds, p. 136.

but those for organizing efficient action. Scope and sequence of content based upon basic or long-range goals, instructional materials, learning activities, and the nature of evaluation to be adopted, are all determined to a great extent by the team. Assignment of both teachers and students, the use and coordination of space and equipment, and timing of activities are other decisions usually required of the team.⁵ Thus, the team is committed to make both curricular and organizational decisions, which are interdependent to a great extent. In spite of, or perhaps because of this close relationship between the two types of decisions, each requires its own justification. Grannis states that a central problem confronting the teaching team is to balance the demands made by each, allowing neither to subject the other to modifications making it ineffective.

Types of Planning

Adequate arrangements must be made for team planning and decision-making on both a team basis and on an individual level. Fischler warns that too much time may be spent in the team planning aspects such as equipment and space for particular lessons; these can be left to the individual teacher responsible for the instruction. He advocates using available time for such policy decisions as what function the large group ought

⁵Bair and Woodward, p. 12.
Shaplin and Olds, p. 123.

to serve. Thus, rather than overplanning within the team structure, the group as a whole should decide on generalizations and allow each teacher to determine his method of attack.⁶

Bair and Woodward are in accord with the pattern of planning advocated by Fischler. They refer to three basic levels of planning. The first is total-team planning, both long-range and weekly. The long-range planning is meant to lay foundations for units of instruction, to refine plans for various phases of large units, and to develop evaluative techniques in terms of generalizations stated. These techniques would have to evaluate pupil progress, team decisions, and group operations, in order to be adequate. Weekly planning is necessary in order to share individual plans for the following week, to check the balance and emphasis given each subject, and to coordinate learning areas; in each of these, regrouping must be taken into consideration. Generally, these meetings should insure continuous pupil progress.

Sub-team planning is the second level to which the authors refer. This is based on general objectives formulated by the team as a whole. Two or more teachers plan cooperatively for various purposes. They may develop and organize units of instruction for the team; they may teach certain

⁶Hillson and Scribner, p. FCR-5A.

lessons jointly, regrouping some students more freely than might otherwise be possible.

The third level is that of individual planning. There is general agreement that each teacher must retain a certain degree of autonomy. Once common objectives are established, teachers have enough freedom of action to capitalize on their special interests, insights and abilities. In such a planning pattern, each might prepare and execute different lessons that arrive at the same generalization. Individual planning is usually shared, discussed, and evaluated by the team.⁷

Team planning does not result in released time for the teacher. Actually, team teaching requires as much if not more time than does teaching in the self-contained classrooms. However, large-group instruction and cooperative planning do yield more time for purposes other than teaching. In the time not spent in the classroom, teachers may be developing resource units, key lessons, and related enrichment activities. Lobb makes this warning:

Sometimes teachers look upon innovations such as this as a release from educational obligations. The purpose of team organization is not to provide teachers with additional free time. Although it is possible and desirable to reduce the proportion of time spent in direct pupil contact, the time saved must be reinvested in plans and preparation.⁸

⁷Bair and Woodward, pp. 96-103.

⁸Lobb, p. 6.

Team Evaluation

Once the many decisions have been made and planning has been put into effect, evaluation necessarily follows. Theoretically the team decides prior to execution of plans the evaluation techniques to be used. In deciding upon these, the team should be concerned with two facets of evaluation.

One is directly related to the educational development of the students. Lobb states that the elements of good testing and grading procedures are the same in team teaching as in conventional approaches. These would include validity, reliability, and utility of both standardized and teacher-made tests. Grading procedures should be adopted in accordance with both the philosophy of the school and the teachers' judgment. "However, in the case of team teaching, there is more urgency to define consistent standards. Almost immediately the staff sees the importance of resolving issues of philosophy and mechanics."⁹ When proper attention is given to the students' progress in relation to expectancies established beforehand, the team will aim subsequent teaching toward any problems recognized. Thus, evaluation will be most realistic when used accurately by the team.

The other facet of evaluation is related to assessment of the program. Again, good testing procedures will yield helpful information to the team as they define subsequent goals

⁹Ibid., p. 29.

and methods to be used in working toward these goals. Teachers may also view actual lessons, especially the key lessons, on which future teaching is based. This observation provides feedback not afforded the teacher in the self-contained classroom. The evaluation at this level is to be used by and for all members of the team. It is analytical rather than judgmental.¹⁰

Group Interaction

A great deal of time and energy is spent by the team on joint planning, decision-making, and evaluation. In each of these areas, intensive group interaction is implicit. It was stated in the definition of the term that team teaching is more than a method of organization. It is a process which must be carried on continuously:

The degree to which team teachers interact on educational matters, formally or informally, is the degree to which team teaching differs from departmentalization or other similar ways of grouping children for instruction.¹¹

This opportunity for interaction provided by team teaching is not an end in itself. Rather, it must have positive results which ultimately benefit the students. For this reason, as was stated previously, it is desirable that team members have certain qualities which would facilitate purposeful

¹⁰Chicago Public Schools, Guidelines..., p. 16.

¹¹Ibid., p. 5.

interaction. Beggs describes the nature of these qualities:

Team members must be people who work well with each other. Professionals do not have to be personal friends to operate together effectively. Respect for competency and trust in motive are the most important attitudes for team members to have or to develop for each other.¹²

It is essential also that they be aware of behavior which forwards or impedes progress, and that they understand the functions of the meetings in which they participate. The clear statement of objectives and priorities for each meeting is conducive to good group interaction. Disagreement in the course of a meeting is natural and often necessary for quality decisions. When personal and emotional conflicts are minimized, differences of opinion can be resolved in a positive manner. However, if severe personality clashes do exist and threaten to impair the effectiveness of the group, it may be necessary to realign teams. One source places such importance on group interaction as to state that "it is the right combination of teachers who find satisfaction in working together that constitutes the strength and future of team teaching."¹³

When a team is made up of a group of teachers who do work well together, the result is likely to be the collaboration and exchange of ideas. This in turn theoretically encourages more detailed, imaginative lesson plans and more

¹²Beggs, pp. 31-2.

¹³Chicago Public Schools, Guidelines..., p. 16.

enriched approaches to instruction of benefit to the students under direction of the team:

The crux of improved instruction is an open-minded, flexible, and questioning atmosphere among teachers, and in this atmosphere greater attention is paid to individual pupils. Teachers sharing, communicating, planning, teaching, and resolving together the myriad problems of children are forced into a careful scrutiny of the educational process. This refinement in working relations must and does result in benefit to each pupil.¹⁴

Another benefit arising from close communication between team members is that gained by the teachers themselves. Ideally, they develop a professional faculty spirit and a deeper mutual regard for teacher talent:

Increasingly they become diagnosticians; they analyze, prescribe, and carry out plans; evaluate, prescribe, and diagnose again.... In essence, [team] teaching forces those involved to make professional decisions based on the full range of factors...entering into the learning-teaching process.¹⁵

The importance of the effective interchange between all members of a teaching team cannot be over-emphasized:

Without this continuous interaction on the part of the teachers, no matter what other organizations or structures are used, there can be no team teaching in the accepted meaning of the term.¹⁶

¹⁴Bair and Woodward, p. 155.

¹⁵Hillson and Scribner, p. GDL-4A.

¹⁶Chicago Public Schools, Guidelines..., p. 1.

CHAPTER V

TEAM TEACHING AND FLEXIBLE SCHEDULING

Learning Group Size

In 1961 Trump and Baynham made several predictions concerning the school of the future. One of these pertains to scheduling. "Today's schedules look both student and teacher activities into a rigid framework and keep them there for a semester or a year. Tomorrow's schedule can be changed at will when needs dictate variations."¹⁷

Stoddard describes the simplified learning process as consisting of two basic phases: perception and thinking. He further states that the learner's thinking, or what he does in reaction to response to what he perceives, does not necessarily need to take place in the same size group as the first part of the learning process:

Heretofore, our schools have operated largely on the belief that both phases of the learning act should take place with one teacher for every thirty pupils. Possibly this has led to considerable waste in having the groups unnecessarily small for much of the step one in learning, the use of the senses, while at the same time the class group was too large from the standpoint of efficient individual reaction and follow-up of the first part of the experience.¹⁸

Further, Finley states that the long existing graded

¹⁷ Trump and Baynham, p. 45.

¹⁸ Alexander J. Stoddard, Schools for Tomorrow: An Educator's Blueprint (New York: Fund for the Advancement of Education, 1957), p. 38.

elementary school has outlived its usefulness and advocates maturation grouping rather than graded grouping, which, although administratively convenient, does not facilitate quality instruction. He is in agreement with Stoddard when he asserts that the belief that twenty-five students are ideal per teacher is unfounded. Instead, he declares that the only real basis for grouping is the individual student. Although this implies a one-to-one relationship, there are times when more than a hundred students in a group will benefit greatly from a listening or viewing situation.¹⁹ Basically, Finley sees as the ideal the ungraded or non-graded elementary school, requiring utmost flexibility.

These three sources illustrate recognition of the need, not only for more flexible time scheduling, but for more flexible group size scheduling. Several terms describe schedules which differ from the traditional pattern; some of those frequently used are schedule modification, variable schedule, and flexible schedule, the last of which is most common. All these terms refer to changes made in daily, weekly, or yearly timetables. Specifically, the changes made alter time, rooms, or teachers of a particular class meeting. Changes can be simple and immediate or complicated and long-range.²⁰

¹⁹Beggs, p. 57.

²⁰Lobb, p. 55.

Team teaching as a method of utilizing faculty time and talents in varying class sizes determined by the instructional task has a close relationship with flexible scheduling. Actually, they are complementary in that both are encompassed in the meaning of staff utilization. Thus, major adjustments in scheduling are required to fully realize the values of staff utilization through team teaching. Jones sees team teaching as altering what has been the most stable, or unchanging part of the elementary school, because it has as its basic tenet total organizational flexibility.²¹

Flexibility in assignment, scheduling, grouping, and location in space of the students, which is difficult to obtain under general methods of school organization, is attainable under team teaching. Time, space and class size are traditionally matters of administrative decision. The advantage the team is that it provides

a convenient administrative unit, smaller than the department and larger than the individual class, for flexibility of grouping for instruction.... Team teaching thus focuses upon the responsibility of the team to take advantage of the opportunities offered to analyze the instructional needs of the children, to provide optimum groupings for instruction, and to adapt curricular and teaching methods to these new arrangements.²²

Thus, the teaching team has control over numerable

²¹Beggs, p. 98.

²²Shaplin and Olds, p. 12.

variables. This should insure a high degree of flexibility and program adaptation based on individual students' needs. The team controls the application of talent by individual teachers in order to obtain the most effective use of their professional abilities. This goal commits the team to flexible scheduling practices in that the correct teacher must be scheduled in the right space and at the proper time for the children or group of children whom the class will benefit most.

Decisions concerning the formation of student learning groups are bounded by certain variables. Several criteria become useful in making such decisions. Content selection is an extremely important criterion in organizing groups. In order to meet students' needs and the goals of the particular subject area, learning groups must explore the content on different levels of complexity and depth. These groups, of course, should be determined on the basis of student achievement.

A second criterion for grouping is the use of instructional procedures. In determining procedures, the students' needs must again be assessed. Certain methods are ideal for one group of children, while these same methods may not be effective in working with a different group.

The duration and frequency of class meetings form a third criterion for grouping. Classes are organized around

the objectives of specific learning activities. Because the student needs vary from group to group, it follows that learning activities will vary.²³

The basic requisite for a learning group, then, is that it be functional; the properly formed learning group will be related to objectives, content, techniques, learning activity, and especially to student needs. This requisite and the commitments implicit in it do not in any sense make justifiable the exclusive use of the small or large group.

Learning Group Size

The large group and small group are both important in the team teaching program; each is functional when used in the appropriate situation. Here, Stoddard's perception and thinking phases of the learning process can be applied; generally, the large group serves the perception phases, while the small group is more functional in the thinking phase.

Bair and Woodward state that, in essence, there are three basic reasons for the use of large groups:

- 1) when a large-group lesson will be more conducive to desirable outcomes
- 2) when the learning outcomes are equivalent to what could be obtained with smaller groups, in which case there is economy of time, space, and materials
- 3) when the large group may be somewhat inferior for that specific lesson to other arrangements but there is greater overall gain to the total educational enterprise.²⁴

²³Beggs, pp. 35-7.

²⁴Bair and Woodward, p. 123.

More specifically, the assembling of a large group of students is functional when introducing units of work, explaining concepts, performing demonstrations, summarizing, and giving tests. Large group instruction lends itself to a variety of teaching techniques, including the use of educational television, films, and other audio-visual aids.²⁵ These aids can play a great role in the perception phase of learning. The material presented in large groups has more uniformity and safeguards against possible gaps in students' learning.

The utilization of large group instruction encourages economic use of time. Teachers do not engage in unnecessary duplication of effort; while one teacher carries on instruction, other teachers who would ordinarily be covering the same material in separate classes have time to prepare on their own. They may spend the time preparing their own future large class presentations, increasing the probability of effective use of audio-visual techniques and instructional materials.²⁶ They may also engage in other professional tasks, such as working with individual children, organizing schedules, or evaluating.

Finally, every teacher is more experienced in one subject or phase of that subject than he might be in another. It usually follows that a teacher experienced in a given field

²⁵Polos, p. 22.

²⁶Bair and Woodward, p. 122.

has a greater degree of enthusiasm for it and tends to make use of more effective motivational techniques and teaching skills. Because staff utilization is of great importance in team teaching, experienced teachers generally teach the large classes in their respective fields. Thus, the students are exposed to skillful teaching in all areas, superior teaching in many.

Large group instruction is essential, but it must not overshadow smaller group instruction. For the former there exists a direct relationship of the learner to the content being presented. The amount of interaction required between the teacher and student should determine to some extent the size of the learning group. The curriculum should be designed to suit both large and small group instruction respectively.²⁷

The second phase of the learning process, or the thinking phase, is of importance here. Some aspects of subject matter and some types of learning experiences involve more direct participation and active response on the students' part.²⁸ In small classes teachers can weigh students' reactions to the content presented. Trump and Baynham see four basic purposes of small group discussions:

²⁷Polos, p. 58.

²⁸Stoddard, p. 38.

- 1) They provide opportunities for teachers to measure individual students' growth and development, and to try a variety of teaching techniques which will be suited to the students' needs.
- 2) They offer group process therapy, by which students are led to examine previously held concepts and ideas; the students may alter rigid, if not mistaken approaches, both to issues and people, and they learn the roles of group members.
- 3) They permit students to discover significance of subject matter and to discuss its potential applicability; this is active participation, rather than passive acceptance.
- 4) Discussions provide opportunities for teacher and students to know each other on a more personal and individual basis.²⁹

These small groups may be based on some identified similarity among the students involved, in order that they may reinforce each other in the learning process. In determining the placement of a student in any one group, particularly if it is homogeneous, it is essential to consider factors such as standardized test results, personal inventories, teacher observations, team discussion, and the student's actual success in achieving previous expectancy goals.³⁰ "Perhaps the most characteristic groupings achieved under team teaching at the elementary school level have been based upon ability and achievement, or a combination of the two, in separate subject areas."³¹

²⁹Trump and Baynham, p. 24.

³⁰Bair and Woodward, p. 167.

³¹Shaplin and Olds, p. 14.

Groups may also be based on dissimilarities as in the case of deliberate heterogeneous grouping. Here, social and personal factors, such as age, interests, learning styles and personalities receive a great deal of attention when grouping students. For both homogeneous and heterogeneous groupings, the team has the responsibility of placing each student where he can be most effective and receive most benefit.

Teachers' roles in the small groups differ from their roles in large group instruction. Again, individual teachers' talents and teaching styles must be considered. While some have more skill in presentation, others have a high level of capability in small group dynamics. The ability to establish rapport with students is of paramount importance. Teachers must perform as consultants, serving most often to point up concepts or to correct errors in information or thinking. They are positioned as guides, rather than remaining in their roles as presenters of information. It is desirable then, that each teacher become an added resource "rather than the source."³²

The teachers' small group roles are further accentuated when working with individual students. At these times, the establishment of a sound personal relationship is essential to progress. The teachers must stimulate and guide independent study on the students' parts.

³²Corrigan and Hynes, Clearing House, XXXIX, p. 312.

Corrigan and Hynes see the small group and individual instruction as being the heart of the team teaching program.³³ Independent study should not be omitted from the program. It allows the student to study that which he feels is important and useful to him. Inquiry and creativity are thus more likely to be stimulated.

The three phases of instruction discussed above should be approximately combined. The team and school should recognize the relationships among various aspects of learning what happens to students.

- 1) when they take part in small classes of fifteen or less for purposes of discussion
- 2) when they work in a relatively independent manner in laboratories, libraries, and cubicles
- 3) when they listen to or view a demonstration, or explanation in the setting of large group instruction.³⁴

Time Schedule

It is established that there is a close relationship between team teaching and the grouping of students based on their needs. Singer states that attempts to treat individual needs through team teaching without concurrent schedule modification may result in unrealistic evaluation.³⁵ Flexibility as an integral part of the team teaching program is illustrated by the fact that scheduling, programming and often

³³Ibid.

³⁴Trump and Baynham, p. 32.

³⁵Beggs, p. 22.

the building itself are fitted to the instructional pattern, rather than its being fitted to them. "The great promise of team teaching,...is that it permits a quicker use of the best of the new techniques, equipment and approaches to education. And the key to this is flexibility."³⁶

Andree stresses flexibility in a general description of his "blueprint" for team teaching. According to him, this blueprint includes

large time blocks for integrated instruction, planning time for teacher program organization and meetings, and of course, a flexible schedule that is really flexible and meets the needs of the program. A good team teaching program should be designed to provide a certain amount of flexibility in the scheduling of classes to allow for varying time requirements, and as the curriculum changes the schedule should be reviewed.³⁷

The time variable in the elementary school can be translated into blocks of time (as Andree has), modules of time, or rotating (floating) periods. In planning any time schedule, the school day should be looked at in relation to the total time allowed for instruction. Large and small blocks of time should be defined in order to facilitate attainment of instructional goals stated.³⁸ Thus, the team divides the time into blocks to suit the needs of the subject areas and the types of learning meant to take place.

³⁶"How to Introduce....," School Management, V, p. 62.

³⁷Robert G. Andree, "Large Classes and Effective Teaching," Clearing House, XXXIII (February, 1959), p. 33.

³⁸Beggs, p. 58.

Large blocks of time are derived from core-type classes.³⁹ These may extend to three hours in length and may be made available to the teaching team for work with students several days each week. Students are often regrouped, and classes rescheduled for different times of the day. The length of the classes are altered within the blocks of time to provide for individual students' scheduling.⁴⁰

A simple method providing for blocks of time during the school day is the "back-to-back" arrangement whereby two classes or groups of students are kept together for two or three hours a day, permitting large-group and individualized instruction.⁴¹

The modular concept, while providing for various class lengths in large blocks of time, is based on the smallest amount of time allotted for instructional purposes. A module is a short unit of time, usually fifteen or twenty minutes long in the elementary school. Under this type of schedule, the teachers determine the time needed for each instructional unit. Different classes may meet for a varied number of modules; some will be one module in length, while others will extend to two or three modules. The purpose or nature of the learning experience will be the basis for teachers' decisions.

³⁹Polos, p. 94.

⁴⁰Roy A. Larmee and Robert Ohm, "University of Chicago Laboratory School Freshman Project," NASSP Bulletin, XLIV (January, 1960), p. 276.

⁴¹Trump and Baynham, p. 117.

A third type of scheduling is based upon the rotating or floating period. The daily schedule leaves open one or two class-length periods during the middle of the school day. During this time, no regular classes are scheduled, and students are scheduled for a variety of activities ranging from work in large groups to independent study, depending upon their needs. Thus, individualization does not conflict with regular classes, since these are scheduled during the rest of the day.⁴²

Thus the time variable, no matter what way it is translated, must be controlled with the utmost attention to immediate and long-range needs. Similarly, individual students' needs must receive priority when learning groups are formed. The team defeats its purpose if it schedules students into large groups and small groups on a regular basis for a semester or year. Instead, the class times and sizes should be determined on a daily or weekly basis:

By contrast [to the inflexible traditional scheduling practices], cooperative teaching encourages flexibility not only in setting up initial groups but especially in re-deploying students and teachers at any later times (emphasis mine). Since several adults with varying backgrounds, competencies, and interests plan the total program for an expanded number of students (fifty to one hundred or more), there is no need to pre-determine group structure for more than short periods of time. Thus,

⁴²Ibid.

educational purposes or group size and membership, and time allocation can be brought into appropriate relationship.⁴³

Stoddard, in his discussion of the two phases of learning, suggests a schedule pattern for six hundred students. The personnel involved are:

- 1) twelve regular teachers
- 2) three specialists
- 3) four aides
- 4) curriculum coordinators
- 5) part-time secretary and music teacher

In the morning, half of the students are in smaller than normal sized classes, each under the direction of a regular teacher. These teachers are relieved of non-teaching duties, allowing them to concentrate on the essential aspects of teaching. The rest of the students are grouped in the following manner:

- 1) in the resource room, using instructional aids
- 2) in the auditorium, library and music rooms
- 3) on the playground or indoor gymnasium

The schedule is reversed in the afternoon with teachers remaining at their positions.

The extent to which this scheduling combines with team teaching would depend upon the responsibility the teachers share in planning, instructing, and evaluating, and the degree to which grouping is flexible and based on individual needs. This is proposed primarily as an economical method of deployment of a large group of students in time blocks.⁴⁴

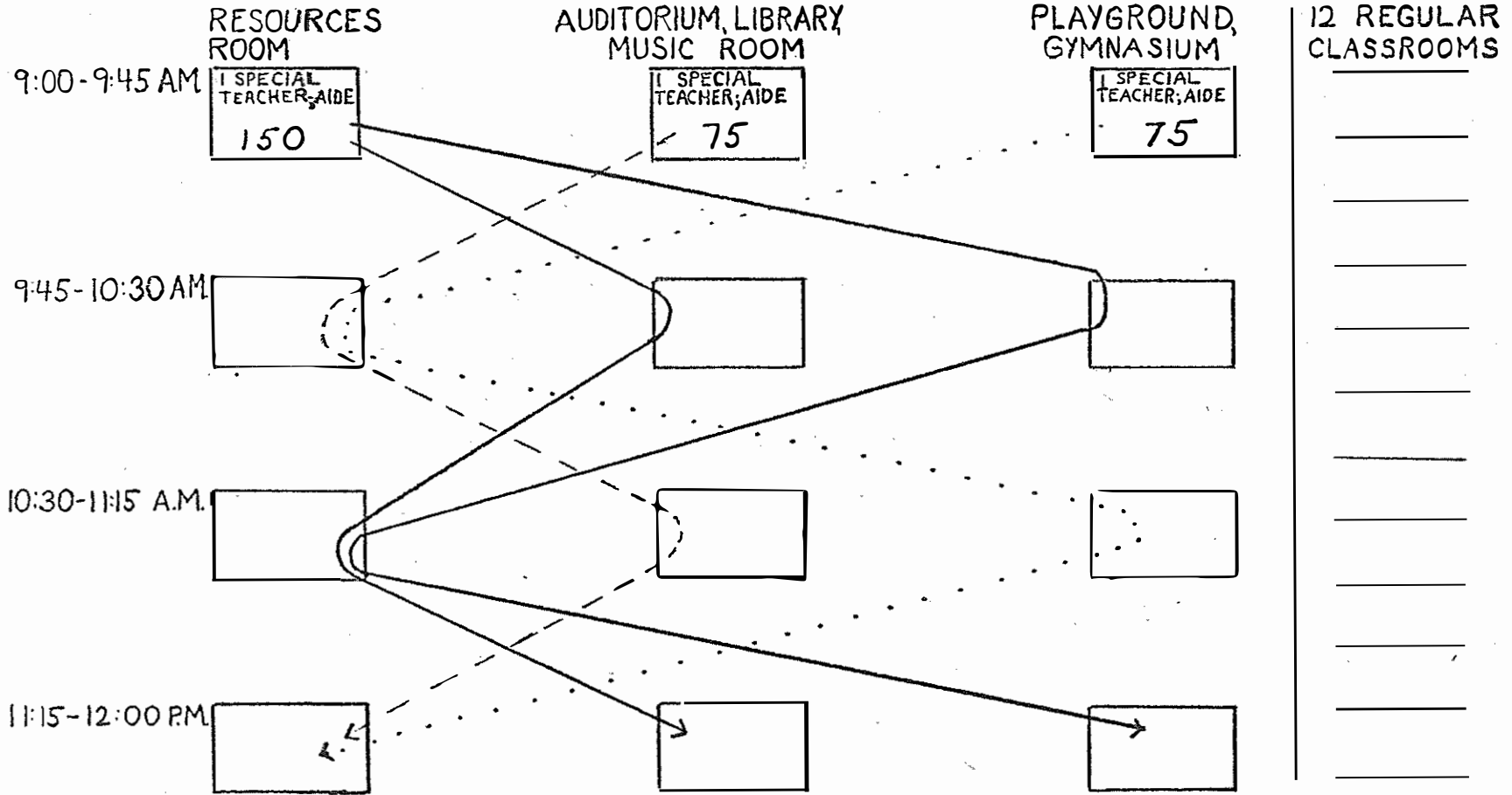
⁴³Hillson and Scribner, pp. GDL-4A, 5A.

⁴⁴Stoddard, pp. 45-6.

Suggested Method of Student Deployment

300 STUDENTS

300 STUDENTS



Importance of Flexibility

There are several advantages inherent in good planning of both time schedules and learning groups. Grouping potentialities of teams are obvious in individual student placement; a child can be shifted from group to group when the need arises—when the team is flexible.⁴⁵

Polos enumerates some of the advantages of flexible scheduling in a team situation. Essentially, it permits:

- 1) the proper use of teacher specialization
- 2) the proper guidance and evaluation of students
- 3) the opportunity for teachers to make better preparation
- 4) the possibility for teachers to provide much sounder programs.⁴⁶

Generally, teachers, student and the entire educational program should benefit greatly from good team planning in these areas. As teachers analyze changing situations and reassign people, time, and facilities,

they become energy centers for the school. Teachers can become prime movers in educational progress. They certainly have a stronger influence and a greater chance to participate in experimentation, which will permit more rapid assimilation of new discoveries and modern techniques.⁴⁷

Students will be able to accept increasing responsibility for their education when teachers guide rather than

⁴⁵ Martha W. Bruce, "Scheduling and Grouping Pupils in a Team," Civic Leader, XXX (March, 1964), p. 3.

⁴⁶ Polos, p. 95.

⁴⁷ Lobb, p. 10.

merely present material. It was said that the flexible environment stimulates creative efforts; children have greater opportunity to develop independence in thinking and solving problems. Grouping and scheduling must exist as tools for carrying on this individualization. The stress is on flexibility in all areas; without this, the advantages to teachers, students, and the educational program cannot accrue.

CHAPTER VI
ELEMENTARY SCHOOL TEAM TEACHING REPORTS

Variety of Programs in Existence

The wide interpretations given team teaching where it has been put into operation may be illustrated by the few following reports. They range from a simple and informal cooperative teaching plan at the kindergarten level to well-established and formal hierarchical plans encompassing entire schools. Thus, in some cases the plan is completely horizontal; that is, no grade levels are crossed when grouping children for instruction. A more common arrangement when an entire school is organized on the team teaching basis is the multi-level grouping illustrated under various names in these reports.

Anderson expresses this view on the diversity of team teaching programs in existence today:

That so many patterns exist is a reflection of the American system of decentralized schools, each community having the freedom to shape its educational program within broad limits along its own line.¹

This is neither to say that diversity is particularly desirable nor that it is detrimental to the concept of team teaching. In comparing the following reports, the differences should not be over-emphasized. There are common elements in these programs; perhaps the most basic such elements are those

¹Hillson and Soribner, p. ASN-5A.

of staff utilization and grouping of children according to what are felt to be most efficient and effective bases.

The Lexington and Oceano projects are perhaps the most broadly developed of these; therefore, more detailed results will be presented in a later section. Generally, all report positive results from their approaches.

Lexington, Massachusetts

The Franklin Elementary School, as was stated previously, was the first team teaching project to involve an entire large school. The project was founded on a basic concern for progress in two major areas: the improvement of instruction through the use of more and new ways of using teacher abilities, and increasing the attractiveness of a teaching career for persons of superior quality through the creation of advancement opportunities. More specifically, these include:

- 1) a teaching hierarchy with salary differentiation
- 2) increased specialization in subject areas
- 3) flexible groupings
- 4) the use of clerical aides, part-time teachers, and lay resource people.²

Essentially the program consists of three hierarchical teams: Alpha, Beta, and Omega. In 1960, Anderson reported that Alpha included the first-grade children and three teachers;

²Robert A. Anderson, Ellis Hagstrom, and Wade Robinson, "Team Teaching in the Elementary School," School Review, LXVIII (Spring, 1960), pp. 71-84.

Beta included the second-grade and third-grade children and seven teachers; and Omega, the intermediate level children directed by eight teachers.³ Because Lexington had no kindergarten program, team teaching was developed more cautiously at the first-grade level; however, it was reported that the staff felt justified in stepping up the pace after they observed that the younger children had adjusted well to the team approach.⁴

A more recent report may be illustrative of the quickened pace implied by the above statement. In 1966, Davis gave this description of the school organization: Alpha was changed to include grade two; Beta, grades three and four; and Omega, grades five and six. Each team is responsible for approximately 200 students. Team hierarchy is in descending order beginning with the team leader (free from instruction one-third of the school day), senior teachers, regular teachers, teacher aides and clerical aides. The art, music, and physical education teachers serve all teams.⁵

The general operational pattern includes some homeroom

³Ibid.

⁴Robert A. Anderson and Donald P. Mitchell, "Three Examples of Team Teaching in Action," Nation's Schools, LXV (May, 1960), pp. 62-5.

⁵Harold S. Davis, How To Organize an Effective Team Teaching Program (Englewood Cliffs, N. J.: Successful School Management Series, Prentice-Hall, Inc., 1966), p. 14.

groupings, large group lessons, and small group lessons; pupils are interchanged among teachers on the basis of needs. The school is making extensive use of audio-visual equipment and self-teaching machines in its overall program.

Oceano, California

In Oceano, California, team teaching was introduced in the 1959-60 school year, primarily to eliminate double sessions.⁶ The program involved seven teachers: three working in the second grade, two in the fourth, and two in the sixth. Group sizes vary for each team, ranging from 75 with three teachers to 66 with two teachers. Personal relationships were given top priority in placing teachers; all have similar backgrounds, although each has an area of specialty.

The teams were not arranged on a hierarchical basis. Instead, each teacher has equal authority and a share in leadership. "We wanted our teams to be three teams or partnerships in which teachers earned leadership by their effectiveness, their contributions, their experience, their knowledge, their interests, or their personality."⁷

⁶Andrew S. Adams, "Operation Co-Teaching, Dateline: Oceano, California," Elementary School Journal, LXII (January, 1962), pp. 203-12.

⁷Ibid., p. 205.

Grouping for reading, arithmetic and language is on a small group basis of growth level. For other subject areas, a class is grouped as a whole or by interest groups. "The arrangement provided for homogeneous grouping by academic ability in a heterogeneous setting."⁸ Because teachers specialize not only by subject areas, but within subject areas, each homogeneous group may receive instruction from two or three teachers. Large group presentations in the science and social studies areas are more frequent, and art and music lessons are usually correlated with these.

The physical arrangement was improvised; portable blackboards and movable desks provide some versatility. In a large room being used by small groups, oral and silent work are staggered precisely to minimize interference. Audio-visual materials and equipment are used extensively. Often clerical duties are handled by one teacher while the other instructs the children to make maximum use of teaching time.

Teachers feel that it has been easier to establish support, especially since children often respond better to one teacher than to another. The chances of dangers arising from a child's personality clash or insecurity with one teacher are lowered by the presence of the other. In the case of a teacher's absence, the presence of the other, with an aide, minimizes interference with the instructional program and the children's

⁸Ibid., p. 204.

unsureness with a stranger.

A primary goal, as stated initially, was to eliminate double sessions. Teaming is seen as aiding in solving the problems of increased clerical work placed on each teacher and lack of facilities and equipment. The program allows groups of teachers to coordinate tasks each would ordinarily be duplicating in separate, overcrowded classrooms. Time is saved both in planning and presentation. This is one of the few fairly large-scale team teaching programs that relies primarily upon natural leadership and teacher complementarity in structuring teams, rather than upon a hierarchy of authority.

Greenwich, Connecticut

The Dundee Elementary School, in Greenwich, Connecticut, took a "Scottish Clan" approach when it initiated a team teaching program in 1962. The three teams established are named as clans: Stewart, comprised of 240 children, kindergarten through second grade; Fraser, comprised of 140 third and fourth grade students; and Mackensie, with 140 fifth and sixth graders. A fourth clan, Barclay, is made up of teaching specialists in music, art, physical education, foreign language, speech therapy, and psychology.

Each team has four to six regular teachers, a senior teacher, a team leader, and a practice teacher and/or teacher aide. Each teacher has a home room for a portion of the children in his respective clan.

Children are grouped homogeneously by ability for language arts, reading, and mathematics. For all other curriculum areas they are grouped heterogeneously. Teachers spend a major part of their instruction time in the subject areas in which they are strongest.⁹

This approach appears to be well-organized. It might be helpful to suggest that the innovative clan approach is unique in name rather than in actual pattern. Basically, the hierarchical team structure is the framework for each clan.

Kansas City, Missouri

The sixty-year-old James School in Kansas City, Missouri, is a National TEPS Commission Demonstration Center. Using funds provided by the Higher Education Act, it recently established these aims:

- 1) creating a core of elementary teachers particularly knowledgeable in academic areas
- 2) building a close and continuing relationship between a teacher-education institution (School of Education of University of Missouri at Kansas City) and teachers in the field
- 3) providing the best possible opportunity for an entire faculty to plan together, both in advance and from day to day
- 4) learning more about what and how teachers need to be taught
- 5) gaining the freedom to establish fresh and flexible grouping patterns that recognize children's individuality
- 6) getting practical experience with elementary counseling, as well as improved understanding of the relationship of the classroom teacher to the counselor and the other specialists

⁹Polos, p. 111.

- 7) experimenting to see if a rather old school building could be remodeled satisfactorily for modern teaching at a substantial saving over new construction.¹⁰

Twenty-four Kansas City teachers and one principal took intensive preparatory courses at the University of Missouri for one year. They became the faculty for the remodeled school (at one-third the cost of a new building). The grouping formed by the faculty consists of four "colonies," each with "home ports." Within the ungraded colonies, home port groups are heterogeneous. The colonies are labeled by letters forming the name "James." They are ordered as follows:

- 1) Colony E: 100 kindergartners
120 six- and seven-year olds
6 home port teachers
- 2) Colony M: 100 children, ages seven, eight, and nine
3 home port teachers
- 3) Colony J: 136 children, ages eight, nine and ten
4 home port teachers
- 4) Colony A: 180 children, ages nine, ten, and eleven
5 home port teachers
- 5) Colony S: supportive services group, consisting of a counselor, librarian, art teacher, and physical education teacher.

The pupil-teacher ratio is slightly over thirty:one. Children are placed in colonies on the bases of reading achievement, social maturity level, work habits, size, interest, and parents' attitudes.

The library plays an important role as resource center for teachers and students. The counselor helps not only in

¹⁰John C. Drake, "Everythings New But the Walls," NEA Journal, LVII (February, 1968), p. 15.

diagnosing learning difficulties, but in strengthening the relationships between the home and school. This opinion of the program is given:

Maybe the best thing at James is the way everybody in the building knows what everybody else is doing and why. For this reason alone, the learning process can scarcely help being more effective.¹¹

This school is one of the few in the country to implement total teaming in a building not originally planned for such a program. However, extensive remodeling was felt to be necessary for the program. The intensive preparation of teachers and of the principal for new roles as specialists further distinguishes this program.

Here, teaming has not been the ultimate goal, as is attested by the aims listed previously. At the same time, non-gradedness was not listed in the aims; yet it is an essential part of the total program, as is teaming.

Detailed test results will not be available in the near future due to the newness of the program, put into effect in the fall of 1967.

Kaneville, Illinois

The Director of Elementary Education for the Kaneland Community Unit Schools in Illinois reports a fairly basic form of teaming in the Sugar Grove School.¹² Here, two first grade

¹¹Ibid., p. 16.

¹²Earl G. Horn, "Team Approach Adds Flexibility to Our First Grade Program," Illinois Education, L (November, 1961), pp. 114-15.

teachers have joint responsibility for forty children. While a testing program was being carried on during the first two weeks of the school year, the teachers observed the maturity of each child. Any grouping during this time was done heterogeneously.

On the basis of test results and each teacher's observations, the children were evaluated and grouped homogeneously for language arts and arithmetic. In the other subject areas, such as social studies and art, grouping is heterogeneous. Social grouping is used when appropriate. Slow groups are kept small, and individual instruction is given when necessary.

Each teacher is responsible for specified areas of the language arts. One teacher has the major portion of responsibility for presentation, guided reading, and extended interests. The other teacher deals with phonetic skills and writing. This teacher also has full responsibility for teaching arithmetic. A probable difficulty did arise with this pattern of teaching subjects in isolation. Teachers report the necessity of reviewing each other's lessons with the children for correlation of subject areas.

Generally, the teachers report satisfaction with teaming. Together they determine strengths and weaknesses of each child; they discuss problems and develop solutions which they feel to be generally better than those arrived at individually.

Groupings are not permanent; a child is transferred from one group to another when both teachers find it best for that

child. Grouping is easier to manage than with one teacher; there is more time to enrich the program for the faster children and to give extra help to the slower children. Absence is less of a problem, because a child can return temporarily to a slower group until he has caught up and is ready to move on.

The teachers are of the opinion that children do not feel as stigmatized by this grouping as they would if placed in one room or under one teacher, as the slow group. They have the companionship of all the first graders, and the freedom of a larger area in which to move. Children "learn to be more self-directive and to take responsibility; they also learn the rights of others and that they must share."¹³

The report emphasizes the profit to the children, socially and intellectually, and points out the aspects most desirable to the teachers--those relating to the pooling of ideas, the ease of joint planning, and the teaching in the curriculum areas in which each is strongest. The general flexibility made possible was an intended outcome.

In this situation, teaming was informally arranged, but it is a legitimate example of team teaching, involving joint responsibility in planning, teaching, and evaluating a group of children. It has encouraged a similar program in the second grade, but actual test results have not been reported as yet.

¹³Ibid., p. 115.

University City, Missouri

In 1960, the McKnight School in University City, Missouri, stated as its first objective, a higher quality instructional program with the utilization of teacher talents and interests.¹⁴ As a start in this direction, three fifth-grade teachers responsible for the instruction of eighty students formed a team in cooperation with the principal.

This is not a departmental program. All teachers teach all subjects of the curriculum, with the exception of French and physical education. Students are taught social sciences and music appreciation in large groups, leaving two teachers free to prepare, confer, or evaluate. Reading groups are small and homogeneous.

Teachers serve as "lead teachers" in specific subject areas. A lead teacher in one subject area becomes the resource specialist for the other teachers, leads in improving materials, instruction and techniques, and guides in grouping, organization, and objectives. Students engage in supervised activity at mid-morning while the three teachers meet with the principal. "It is here that lead teachers on the various areas present new materials and methods; on-going activities are evaluated; placement of individual children in groups is reviewed and decisions

¹⁴H. Frank Duval et al., "Three Heads Are Better Than One," Grade Teacher, LXXXI (May, 1964), p. 124.

are made."¹⁵ Each morning one teacher is in charge of the agenda to assure open communication and adequate coverage of material.

Students are responsible for their own materials. They are involved with at least four teachers during the day, although each has a home base to which he returns. "McKnight's concept of the self-contained class has been replaced by one in which children may be assigned to various learning activities in relation to their demonstrated skill development."¹⁶

This teaming program has not reported statistical results of its success. Members state that it is not their intention to enter the field of formalized educational research.

As has been stated, the primary goal was and is to provide a more skilled and knowledgeable staff who ultimately provide a more vital instructional program. In the evaluative judgment of the teachers of McKnight, this is occurring.¹⁷

The school has reported continuance of the program in spite of changes in personnel. This success should not serve to undermine the importance of good relationships between all members of a team. Rather, it does show that new personnel have adapted to the program in progress.

Centerville, Ohio

The Driscoll School in Centerville, Ohio, has supported a team teaching program at the kindergarten level for two and a half years. The kindergarten consists of 120 students, sixty

¹⁵Ibid., p. 122.

¹⁶Ibid., p. 24.

¹⁷Ibid.

in the morning class and sixty in the afternoon class. There are two teachers working in one large room equipped with folding doors. The teachers realize the importance of close cooperation:

In a team arrangement like ours...there can be no 50-50, "I did it yesterday so you do it today" attitude. It would reduce the efficiency of the team and could defeat its purposes.¹⁸

When working with the group as a whole, one teacher usually conducts the class, while the free teacher helps those who need it. The atmosphere is casual, so much so that the observing teacher may interrupt at any time to make a contribution. When not needed, the free teacher may handle paperwork, records, lesson plans, and parent reports.

When it is necessary to form small groups, the folding doors can be used; however, small groups often work in the room without the need of being partitioned off. The teachers report the ease of taking field trips, either with the class as a whole, or, preferably, with smaller groups.

The teachers report some lack of intimacy, but feel that not knowing each other child well may hasten a child's social maturation. They explain, too, that most of the children had nursery school experience; this has eliminated the need for a great amount of readiness work and may be relevant in their adjustment in general.

¹⁸"Does Team Teaching Work in Kindergarten?" Grade Teacher, LXXXV (March, 1968), p. 158.

Sophisticated Team Teaching Programs

The following two reports are of team teaching as utilized in Chicago, Illinois, and in various cities in Wisconsin. These projects were chosen as being representative of sophisticated application of the team teaching approach. They appear to have sound justification for its use although their goals are vastly different. At the Bell School in Chicago, the aim is to provide complete integration of its programs for normal and exceptional children. The Research and Development Center in Wisconsin is concerned with conducting controlled experiments within the team teaching framework.

In both cases, team teaching is being considered a means to an end. In both, it will be noted that a formal hierarchical structure is well-established. The continuous crossing of grade levels is another common characteristic; this parallels the movement in nongradedness as a vertical school organization. It is best effected in schools which implement team teaching throughout the grades, rather than at one grade level. Perhaps the line and staff teams at the Bell School can be considered the most complete tools in organizing both vertically and horizontally; that is, they provide continuity of procedural pattern and curriculum.

Both projects appear to have placed team teaching in the appropriate context; it is neither an added innovation, nor the main objective. It is an integral part of the total school; it affects and is affected by the curricula involved

and its inherent flexibility is put to maximum use in attaining established goals.

Chicago Public Schools

For many years the professional staffs of the Chicago public schools have been working cooperatively with varied organizational and grouping procedures, approaching actual team teaching by sharing skills in the curriculum areas, particularly in art, music, and science. Some regrouping across grade levels has taken place in order to work with limited ability spans in the skills of reading and arithmetic. "Many formal team teaching projects were initiated in the early 1950's on an individual school basis and were further defined in the early 1960's as the teaming process came under more definitive study nationally."¹⁹

During the summers of 1962, 1963, and 1964, selected teachers and the principals of the Alexander Graham Bell, the John T. Pirie, and the Ira F. Aldridge schools were invited to participate in SUPRAD team teaching workshops sponsored by Harvard University in the Lexington schools. Fellowships for those participating were provided by the Chicago Board of Education. "These schools extended and modified their team teaching programs as the result of this experience, and their staff served as resource personnel to those administrators,

¹⁹Chicago Public Schools, Guidelines..., p. 35.

supervisors, and teachers throughout the city and suburbs who were interested in investigating the team teaching process."²⁰

One such case is the Johnson School, designed specifically for team teaching. The program was initiated in the school in 1963 under the leadership of the Bell School principal. Begun as a special summer school program, the team teaching at Johnson now involves approximately thirty teachers.²¹

John T. Pirie School.--The John T. Pirie School is well suited to team teaching, in that the building was designed and constructed specifically to facilitate the grouping of children. The school consists of two kindergarten and twenty classrooms for grades one through six. "There are seven clusters of contiguous rooms where acoustically sound walls open into each other with ease; teachers are thus permitted to utilize fully the possibilities of immediate regrouping."²² The school opened in September, 1962, enrolling 700 children. The teachers assigned to the school were selected with the understanding that they were to participate in the team teaching program.

Each team involves 75 to 125 pupils. Large group instruction techniques ranging from lectures and demonstrations to film, film strips, and overhead projectors, are employed by

²⁰Ibid.

²¹Education in the Kindergarten and Primary Grades, Study Report No. 5, 1964 Series (Chicago: Board of Education of the City of Chicago, 1964), p. 44.

²²Chicago Public Schools, Guidelines..., p. 36.

each team. Teacher specialization and the use of outside resource persons are thus encouraged. These large group procedures also serve to avoid duplication of effort and inequalities of presentation.

Teams have regular planning meetings in the morning before school. It is not unusual for them to meet at times during the school day when scheduling permits; frequently they meet after school hours. Their opinion of the program follows:

Pirie teachers have agreed in evaluative sessions that team teaching has much to offer the profession along many dimensions: an increased professionalism among staff members, the better utilization of faculty capabilities and interests, a better in-service education for new teachers and student teachers who begin their careers working with a team, an increasing eagerness on the part of the children to learn as they are more consistently challenged in their abilities and talents, more extensive use of resource materials, and a sharpened awareness and interest in education on the part of the community.²³

Ira F. Aldridge School.--Unlike the Pirie School, team teaching at the Ira F. Aldridge School began with only six teachers in 1964. At present it involves all staff members in group planning and decision-making. Although it is a new school, it was designed to accommodate self-contained classes. To facilitate teaming, teachers on the same team are assigned adjacent rooms. Special space was made available for small

²³Ibid., p. 37.

group instruction in the health and library workrooms. Classes in the gymnasium and library were scheduled to allow space and time for large group instruction and team planning.

A team leader provides over-all supervision for the three subteams of thirteen teachers. An auxiliary staff comprised of the librarian, physical education teacher and adjustment teacher works with the subteams. Classes are organized initially on the basis of heterogeneous grouping, necessitating continuing regrouping for instruction. Planning sessions at which all class re-scheduling is determined have resulted in much teacher interaction. As at the Pirie School, these sessions are held at 8:30 in the morning, and often during lunch hours and scheduled times during the day.

"The Aldridge staff identifies both quantitative and qualitative progress in terms of its positive acceptance of the implications of teaming. This acceptance involves...philosophical changes in educational theory which point up the fact that the complexity of today's knowledge demands the sharing of teaching tasks.²⁴

Alexander Graham Bell School.--Alexander Graham Bell School is a State Demonstration Center for the Education of Gifted Children.

One of the earliest forms of team teaching in the Chicago public schools was developed in the 1950's at the Bell School, where a large center for deaf and blind children is combined with a regular complement of K-8 children. "The pattern of integration of handicapped and regular children

²⁴Ibid.

developed in the school, and the accompanying need to join the effort of the special teachers with the regular teachers in the education of the total student body, lent itself not only to team teaching, but to the combination of team teaching and continuous development."²⁵

The school enrolls approximately 750 children, one-third of whom are handicapped to such an extent as to require a special education program. Of the professional staff of 65, two-thirds meet full requirements in both regular and special education.

The following encompasses the philosophy governing the Bell School:

All Bell pupils are children first, with the needs of all children paramount; the emphasis on their differences is secondary consideration. All of these pupils, regular, blind, deaf, partially sighted, and multiply handicapped, work and play together. All teachers serve all pupils. Each pupil has a program structured to success and tailor-made to his unique needs and abilities. All teachers are regular teachers, first, in service to all children; all teachers are special educators, second, with very specialized skills which make them professional leaders in their particular function to the total school program. Bell School fosters the teaming of teachers and the integration of all its pupils.²⁶

²⁵Education in the Kindergarten and Primary Grades, No. 5, p. 44.

²⁶"The Alexander Graham Bell School Provides a Team Teaching Program for Its Normal and Handicapped Gifted Children" (Alexander Graham Bell School, Chicago, April, 1964), p. 3. (Mimeographed.)

Team teaching has been in effect at the Bell School since 1956 and developed out of the necessity for complete staff interaction in developing an integrated program involving all handicapped and normal students. "It effectively enriches the total program for theoretically, no one teacher has the broad and intensive background in this day of the explosion of knowledge to present as effectively as possible the structure of all fields of study through the method of discovery to pupils of normal intelligence. The problem becomes a far more complicated one when related to serving the needs of the gifted and further complicated and challenging when some of these gifted are handicapped through defects of sight and hearing."²⁷

In order to serve the needs of the students in a challenging, effective manner, the Bell School staff works in and through curriculum on staff teams, grade level or line teams, and department teams (those serving the normal, blind, deaf, hard of hearing, partially sighted, and multiply handicapped).

The school sees team teaching as making possible "an intensification of the study of the gifted, the further study of the grouping and regrouping of pupils to the established goals of each lesson, the experimentation with methodologies, the creation of materials, the refining of techniques, ...and the structuring of evaluation procedures."²⁸

²⁷ Ibid.

²⁸ Ibid., p. 4.

This emphasis on the gifted and handicapped children does not undermine the programs for the normal and slow students. The school is concerned with each child's academic achievement, as well as his social, vocational, and emotional adjustment in a normal functioning society. "Each child no matter in which department he is enrolled has a program custom made to his needs and abilities and is grouped and regrouped homogeneously and heterogeneously with other pupils depending upon the purposes and goals of the learning experiences which are being provided for him."²⁹

This concern, relative to integration of handicapped and regular students, is re-emphasized in the following points; each makes implicit the necessity for team teaching in order to achieve the goal for total integration set by the school:

- 1) Integration must be structured for success; the child's readiness is of paramount importance in planning a program tailored to his needs and abilities.
- 2) The special and regular teachers serve the needs of both the special and regular students, not exclusively, but interchangeably, according to the immediate objectives.
- 3) Successful integration is dependent upon the question of what pupil, at what time in his school career, under what condition, for how long, with what teacher in teams of experimental background and education (a special teacher, a regular teacher, one experienced in both areas), with what group of regulars and in what subject.³⁰

²⁹"Bell School Philosophy and Objectives" (A. G. Bell School, Chicago, n.d.), p. 1. (Mimeographed.)

³⁰Ibid.

At the primary level, the continuous development program and the resultant flexible grouping have been utilized for three years. At the intermediate level both the very able and the very slow pupils are grouped out. Much of the school programming is geared to the development of the effective non-graded school.

A description of the actual team teaching structure within the school is necessary in clarifying the school's means of implementing its philosophy and of attaining its goals.

The faculty is organized into four line teams at the nursery-kindergarten, continuous primary, intermediate, and departmental grade levels. Decision making in each is effected under the guidance of the team leader in morning planning and evaluative sessions. At these sessions daily plans for grouping and regrouping of children according to the objectives of the specific lessons are determined. The size of the groups vary so that the pupil-teacher ratio for any specific lesson at a specific time is tailored to the goals of the lesson and to the needs of the pupils.³¹

A fifth team known as the total-services team and composed of those teachers who meet all pupils, such as the physical education instructors, the home mechanic instructor, the

³¹"Team Teaching Structure at the Alexander Graham Bell School" (A. G. Bell School, Chicago, n.d.), p. 1. (Mimeographed.)

librarian and adjustment teachers, the foreign language teacher, the resource teacher and the assistant principal, work out plans relative to the total school program and serve also as resource persons to the line teams.

In addition to these teams are fifteen staff teams with the specific responsibility for consistently upgrading the total school program in the area of their curriculum specialty. These teams meet twice a week in planning sessions "and work out a consistently on-going inservice training program for the total faculty."³² An added function is that of assigning materials and methods for the gifted. Staff team leadership rests on the faculty member most effective in the area under study. Each staff team has representation from each of the four line teams, thus insuring cross-communication. (See figures 9 and 10.)

Each faculty member at the Bell School, then, has two team roles; the line role representing his grade level and the staff role representing his curriculum strength. He is expected to accept leadership "in those areas in which his capabilities earn leadership, and he pulls from the strength of the total staff in those areas in which he needs growth."³³

The principal's cabinet is composed of the assistant principal, the line team leaders, the social center director, and five elected staff members--two representing the regular and total service departments, two representing the deaf and

³²Ibid.

³³Ibid.

hard of hearing departments, and one representing the blind and partially sighted departments. All special teachers are integrated into the line and staff team structure. (See Figure 11.)

Once a week the principal meets with the total staff to share experiences. This aspect of the pattern of team organization further insures continuous communication. The complex hierarchical structure provides for formal leadership at some points, while allowing natural leadership to develop to a great extent in both the staff teams and the line teams.

The school has laid ground rules to be accepted by those teachers working on the staff; a partial list of these rules appears below:

- 1) There is no room for those who take professional criticism personally.
- 2) Decision making and planning as a group are the essence of team teaching.
- 3) Due to the minimum of administrative guidance, much authority is released to the team to allow for full use of teacher creativity. This is based on the theory that "the true professionals (emphasis original) achieve greater heights under the fullest freedom possible."
- 4) Members must have the willingness to change and a unique flexibility.
- 5) Everyone on a team is a professional equal. The team leader is appointed at the beginning to initiate action; different leadership will emerge frequently. "Responsibility devolves, however, upon all members of the team equally. The team leader merely facilitates the free exchange of ideas and serves as a moderator."
- 6) The use of all resource people is urged.
- 7) Planning the class size according to the purpose of the lesson is urged. There is no definitive research that a small class leads to better

pupil understanding.³⁴

These ground rules are widely applicable. They are in accordance with the school philosophy and its concern for meeting each pupil's needs.

Because the concern is for every student, a specially developed program for gifted children of all departments has been in progress for five years. Of 750 pupils, 93 have been identified and studied for enriched programming and guidance. Pupils are selected on the basis of IQ, "high achievement, teacher judgment, and consistently outstanding performance in such areas as the performing arts, evidenced creative behavior, and divergent thinking."³⁵ The gifted handicapped students are grouped "with their special peers for those skills specifically relating to their needs as blind or deaf pupils and regrouped in intensive integration experiences with the regular pupils of comparable ability for the broadest participation possible consistent with their success."³⁶

Thus, a program of continuous evaluation is necessitated, allowing integration for each pupil at the earliest feasible time and to the greatest extent possible. This entire integration program is facilitated by team teaching at all levels.

³⁴"Team Teaching Grounds Rules" (A. G. Bell School, Chicago, n.d.), pp. 1-2. (Mimeographed.)

³⁵"The Alexander Graham Bell School Provides a Team Teaching Program," p. 6.

³⁶Ibid., p. 5.

At the departmental level, students are placed in three basic homogeneous groups for all academic experiences and formal guidance. These groups are further broken down to those highly gifted and those of remedial pupils. Individual programming is provided for the remedial pupils.

Departmental teachers team in working with all pupils. Two or more develop the social studies program for one grade level. The language arts top groups in both the seventh and eighth grades are programmed at the same time; this makes possible the grouping and regrouping of pupils across grade levels, allowing all to proceed at the maximum rate. Two teachers team in developing the total science program. Both have graduate majors in science; one is a specialist in working with the deaf; the other specializes in working with the blind.³⁷

At the intermediate level the most able students are grouped out into two self-contained classes under a team teaching program; one at the fifth and sixth grade levels and one at the fourth grade level. Handicapped children whose ability warrants such placement are integrated into these groups. Basic features at this level are curriculum enrichment, making fullest use of all educational media, and stressing techniques and processes of inquiry. In the fifth and sixth grade groups special team projects are underway in the areas of social studies, science and language arts. In the fourth grade group,

³⁷"Special Features" (A. G. Bell School, Chicago, n.d.), p. 5. (Mimeographed.)

teaming emphasis is placed on social studies, mathematics, and the development of study and research skills.³⁸

The concern for the students, it is again emphasized, extends to all. The slower students are grouped in small classes for skill experiences; materials and techniques which are used in these groups differ greatly from those used with accelerated or regular pupils. Like the gifted handicapped, the normal handicapped are included in the total program on their level of ability and integrated to the appropriate degree.

"Team teaching makes possible the above flexibility in the size of all classes; for expressive and skill experience the classes are smaller than the pupil-teacher ratio; for reception experiences, the classes are larger. This planning makes possible the use of the most able and highly skilled faculty members for each lesson. Team teaching effects the successful grouping and regrouping of pupils to the purposes of each lesson.

"The flexibility inherent in team teaching not only makes maximum use of staff potential and creativity but also makes possible the most ideal development of programs designed to suit the individual needs of each and every pupil enrolled in the school."³⁹

³⁸Ibid.

³⁹"Special Features" (A. G. Bell School, Chicago, n.d.), p. 5. (Mimeographed.)

FIGURE 10
Line Teams: Bell School

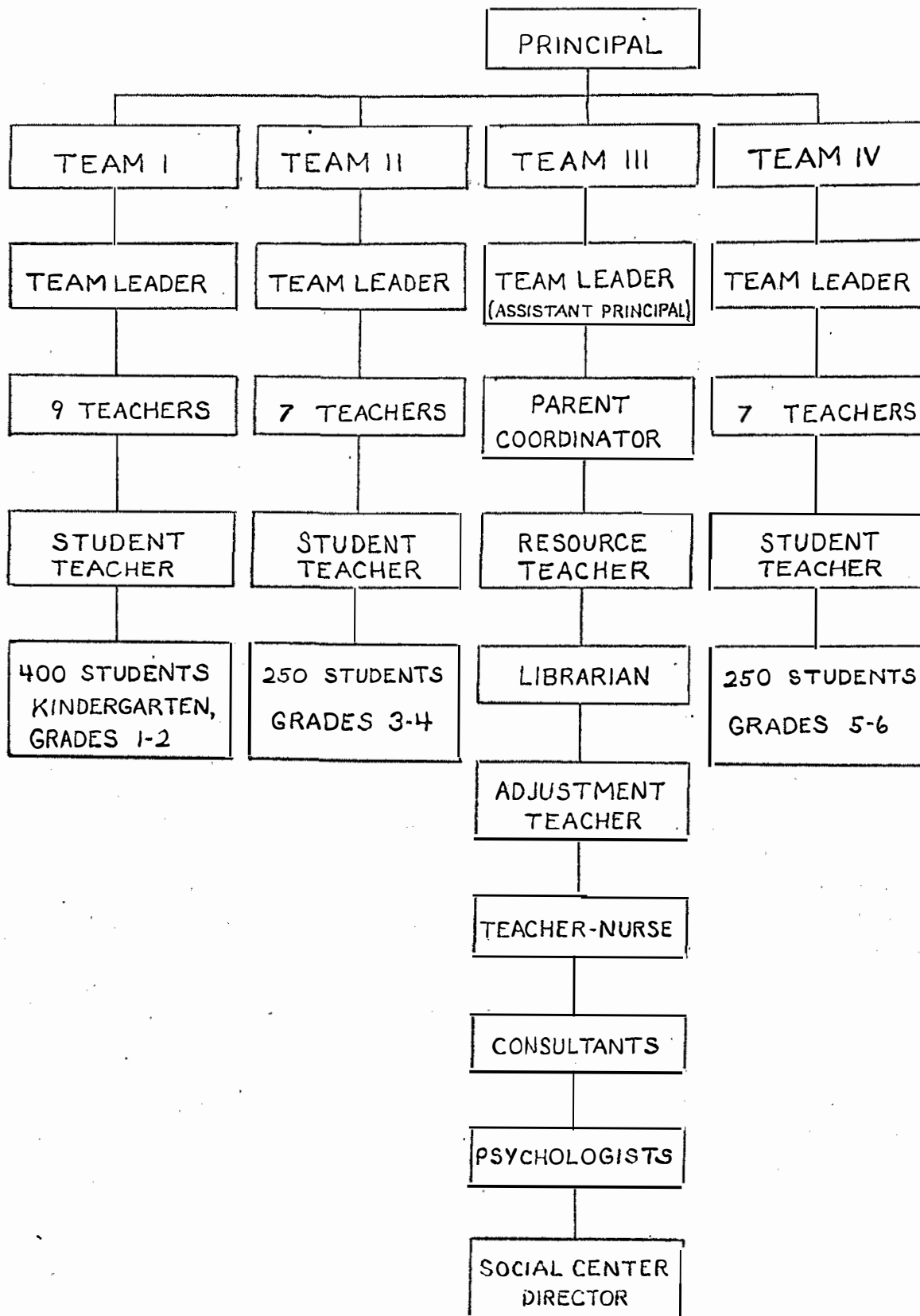


FIGURE 11
Staff Teams: Bell School

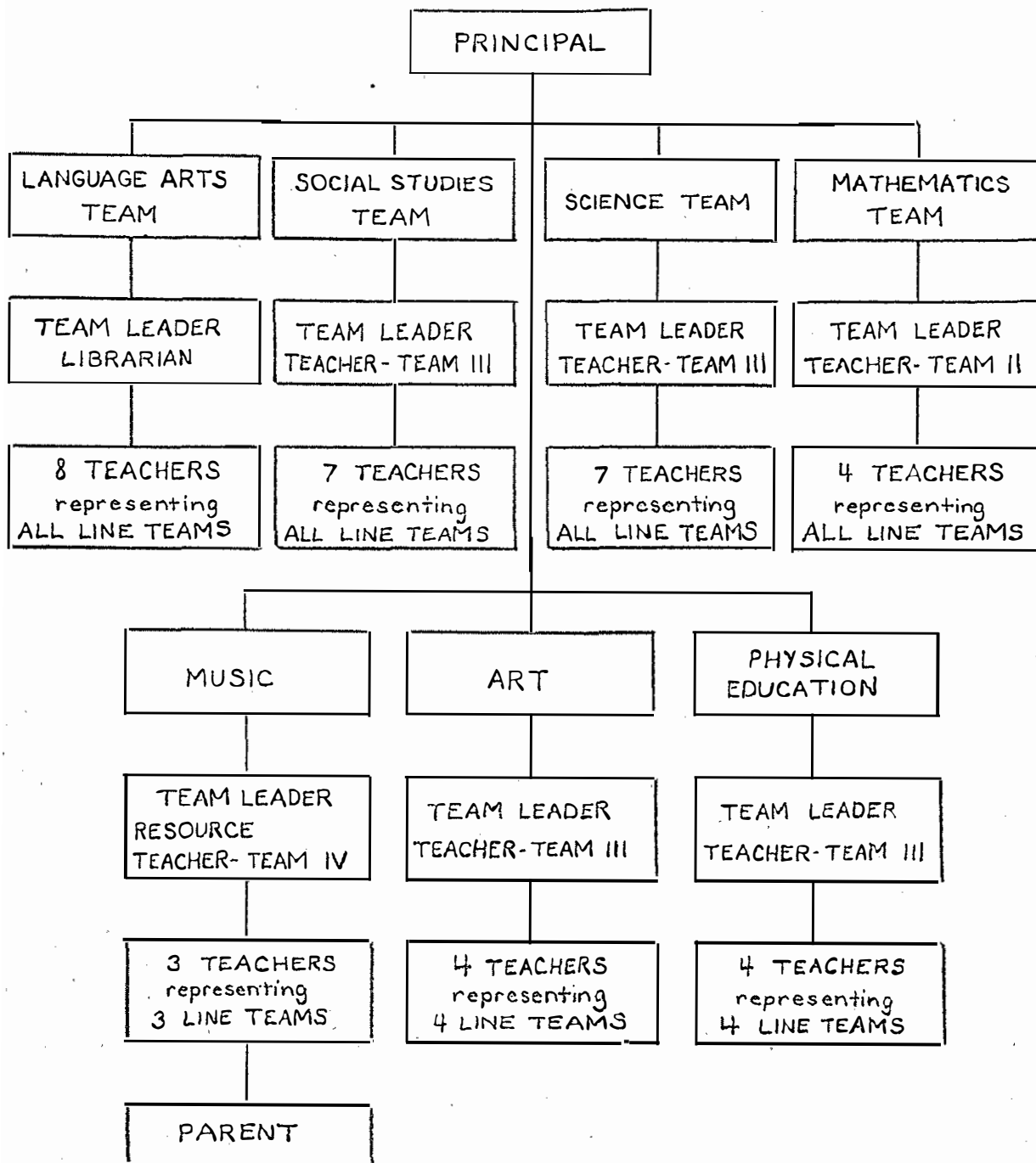
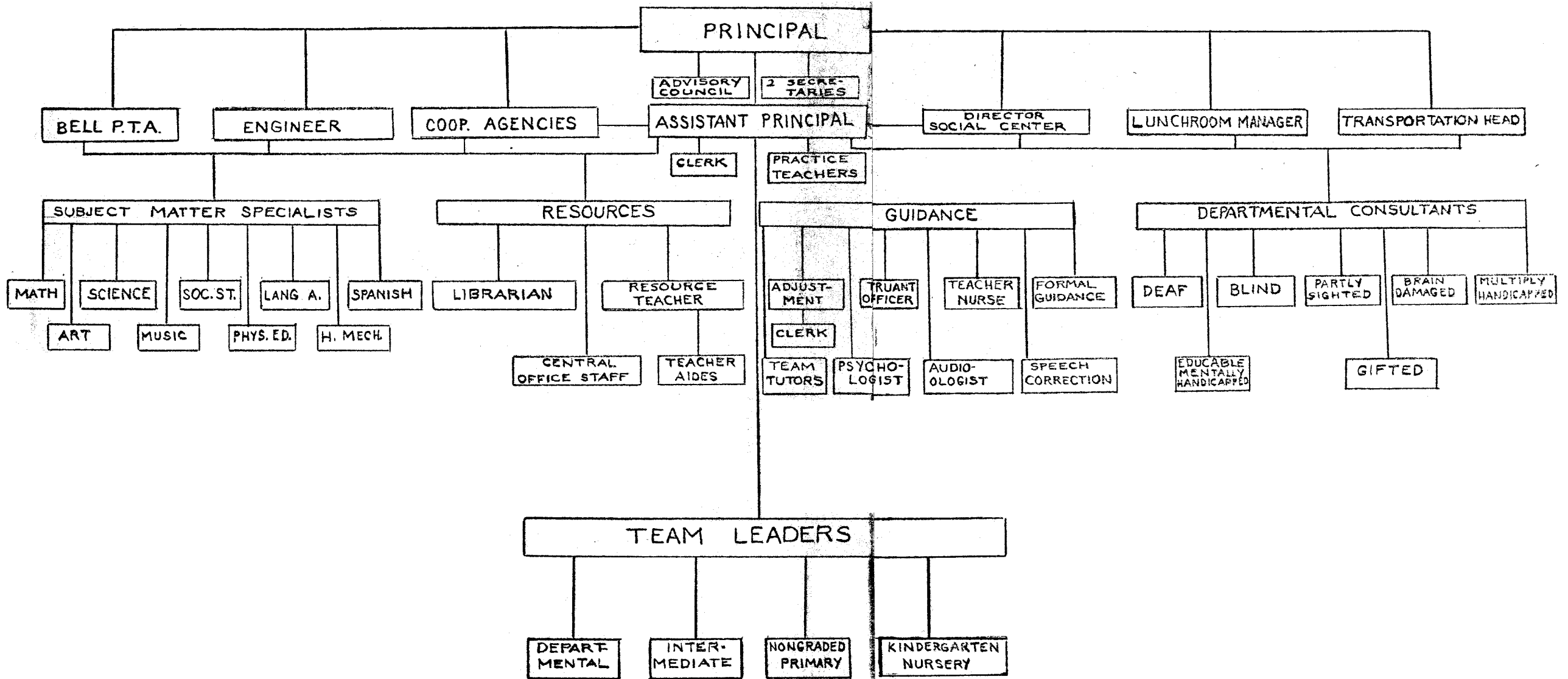


FIGURE 12

Total Organization: Bell School



Wisconsin Schools

The Wisconsin Research and Development Center for Cognitive Learning, in cooperation with local school systems and the State Department of Public Instruction, began Project MODELS in the 1965-1966 school year. The two main objectives were to increase efficiency of student learning in subject matter of high cognitive content and to provide a facilitative environment for carrying out research and development activities of the Research and Development (R & D) Center and local schools.

In Project MODELS all factors involved in improving instruction within a school building are considered, including the faculty itself, the equipment, the instructional material, the instructional program, the instructional personnel, and the students. In addition, Project MODELS is concerned with relationships of the personnel in a school building and representatives of the central staff, the R & D Center, Department of Public Instruction, and others.⁴⁰

The primary emphasis in the elementary schools, kindergarten through grade six, focuses upon the improvement of learning in three main subject areas--reading and other language arts, arithmetic, and science--and upon improvement of learning conditions in three related areas--motivation, individualization of instruction, and concept learning.⁴¹ The secondary emphasis--upon developing a new instructional organization, redefining the roles of some educational personnel, and establishing

⁴⁰Klausmeier, et al., p. 1.

⁴¹Planning thus far focuses upon improving instructions in one but not more than two subject fields in a school building during a given year (Ibid., p. 4).

additional roles--is meant to facilitate a systematic process in the improvement of learning. Those roles requiring redefinition are those of the central staff, the principal, and certified teachers. The new roles being considered are for teacher leaders and non-certified personnel. Time, space, equipment, and supplies are being manipulated for improvement of instruction, though they are not being given intensive study.⁴²

New organizations have been developed in local school buildings in Janesville, Madison, Manitowic, Milwaukee, and Racine. The 1966-1967 school year was the second year in which these organizations, called R & I (research and instruction) Units, functioned in the above schools.⁴³

The R & I Unit can be defined as the basic instructional unit replacing the self-contained classroom. Each unit is composed of a unit leader, two or more certified teachers, one or more noncertified aides, and the students for which they are responsible. The number of certified and noncertified personnel varies according to the number of students.

The unit leader is responsible for the instructional program of the unit. He teaches from one-half to two-thirds of

⁴²Ibid., p. 1.

⁴³Herbert J. Klausmeier and Mary C. Quilling, "An Alternative to Self-Contained, Age-Graded Classes" (Madison: Wisconsin Research and Development Center for Cognitive Learning, n.d.), p. 1.

the school day and is thus available at times during regular school hours for other activities. The certified teachers carry out the usual instructional responsibilities, operating as a unit rather than as self-contained classroom teachers. The non-certified personnel perform a variety of secretarial, management, and other school-related activities under the leadership of the unit leader and the teachers.

An important feature of each R & I school is the instructional decision-making committee comprised of the building principal and unit leaders. It meets at least once a week and frequently does so more often. The committee works with consultants from the central staff, the R & D Center, the State Department of Public Instruction, and other agencies as needed. Decisions made by this committee are implemented within the units through the unit leaders. The advantages of this building organization are felt to be these:

- 1) It provides time for planning the instructional program during school hours.
- 2) It promotes clear articulation of the instructional program for the entire school.
- 3) It utilizes key certified personnel in planning the school-wide program.
- 4) It tends to increase the effectiveness of the building principal and central staff in improving instruction, with teachers working at a professional level.
- 5) It utilizes noncertified personnel performing duties necessary to the total program.⁴⁴

⁴⁴Klausmeier et al., p. 4.
Klausmeier and Quilling; p. 2.

It is felt that this organization provides opportunities for continuous curriculum development and improvement; in addition, the probability of providing for individual differences is enhanced. Individualization requires reliable diagnostic procedures, adequate instructional materials, and more flexible utilization of personnel, space, and time.⁴⁵ In organizing the units, scheduling has been thought of in terms of large blocks of time allowing for flexible grouping. Within these time blocks, lessons can be planned on the basis of children's needs and are not forced into inflexible time slots.

The staff coordinator of the R & D Center may meet frequently with principals and unit leaders of all schools to facilitate the sharing of information and the unification of the programs. The staff coordinator, curriculum consultants, building principals, and representatives of the R & D Center meet to plan the total program. This further unifies effort made by all personnel.

The principal of the school is the key person to a successful, well-implemented program. He needs to be enthusiastic about unit teaching and well informed about the instructional program. He is the administrator and coordinator and must exercise more responsibility for instructional improvement than

⁴⁵Klausmeier et al., p. 5.

many principals now do. At the same time, he must be willing to delegate responsibilities and provide support to the unit leader.⁴⁶ He plays an important role in the selection, not only of unit leaders, but of teachers and non-certified personnel.

It is considered that inservice or on-the-job education is essential for the entire staff throughout the first year a unit school is in operation, and a workshop or seminar prior to the beginning of the school year is desirable. In such a workshop, the central staff personnel, the principal, the unit leaders, the teachers, the non-certified personnel, and subject matter consultants involved in the program should be active participants. Here they are to be encouraged to clarify objectives, establish good interpersonal relationships, become oriented to the instructional unit concept, and define the roles and responsibilities of each staff member.⁴⁷

The emphasis placed on a continuous unified instructional program in which individualization can take place, suggests the distinct advantage of completely unitizing the school. Within a committee of consultants from the R & D Center, the building decision-making group and the local central staff, the framework for development of a unified curriculum can be organized. This can then be best implemented in a unitized school.

⁴⁶ Ibid., p. 6.

⁴⁷ Ibid., p. 8.

It is within each unit that instructional problems must be resolved. Here, ideally, each member has the benefit of several other teachers' insights and experiences in subject areas and their knowledge about individual children when making instructional decisions. These decisions must be based upon diagnosis of each child's characteristics. The unit leader becomes analyzer and prescriber for individual students and communicates his knowledge to other teachers, who plan with the leader the materials and methods to be used. He is responsible for the individual child in these various ways:

- 1) determining how far each has progressed
- 2) diagnosing weaknesses in each child's learning
- 3) determining how effective materials and methods are
- 4) locating new instructional materials
- 5) continuously evaluating each in terms of instructional objectives
- 6) providing continuous feedback to staff members and learning cooperatively with them an appropriate instructional program.⁴⁸

The R & D Center provides consultant assistance in four school systems. Within these systems, schools organized in the unit plan are closely tied with five R & D projects, four of which are designed for the elementary school. These projects concern the subject areas of arithmetic, reading, and science, and the related area of concept learning. During the 1967-1968 school year, four seminars are being held by the R & D Center for unit leaders and other staff members in the school system.⁴⁹

Results of field testing will be presented subsequently.

⁴⁸ Ibid., p. 11.

⁴⁹ Ibid., p. 13.

However an informal conclusion drawn by the R & D Center states that the school organized into R & I Units or modified versions meeting situational characteristics,

has significant place in the educational scene today. Further, the explosion of knowledge, the improvement in teaching-learning process, and the massive introduction of educational equipment require cooperative activities among local schools and other agencies such as colleges, state department of public instruction, R & D Centers, and regional laboratories. Tinkering with one or two elements of a total system, such as the textbooks, programmed material, and audiovisual equipment, teacher aides, or inservice education does not yield high rewards.⁵⁰

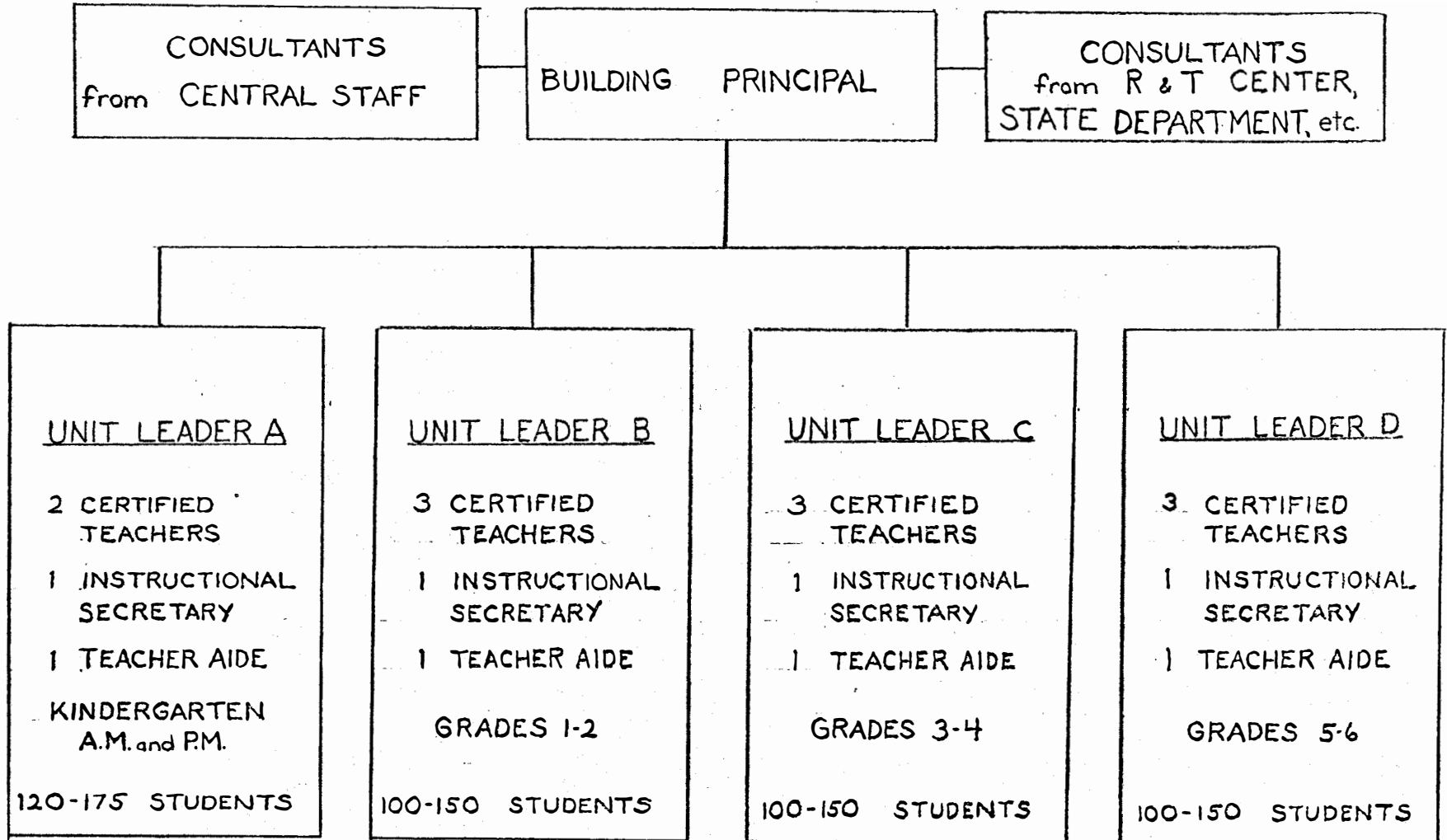
Giese Elementary School.--An example of one such unitized school cooperating with the R & D Center is the Giese Elementary School in Racine, Wisconsin, now in its third year of operation. For the first two years team teaching was carried on within grade levels. During the present year some grade lines have been broken down as a step in the direction of one of the end goals, that of complete individualization.

The school is organized into four units (teams) according to the prototype provided by the R & D Center (Figure 13). There exists an established hierarchy within each unit and within the school as a whole. The unit leaders at this school are required to teach only 30 per cent of the time. Within

⁵⁰Ibid., p. 12.

FIGURE 13

Prototypical Elementary School Organization: Wisconsin



each unit, in addition to the leader, are five to seven certified classroom teachers and two auxiliary staff members: an instructional secretary and a teacher aide. Both are assigned duties as the team sees fit. A unit may have an intern teacher who, it is emphasized, is not subordinate to the certified teachers, but, rather, is accepted as an equal.

Children are grouped in stations within each unit. Regrouping is based upon teacher judgment and results of achievement tests. The Stanford Achievement Tests are commonly used at the intermediate level. Children are grouped homogeneously for subjects such as reading and arithmetic. In areas such as music and art, grouping is heterogeneous. (There are no established criteria for evaluation in music; thus, groups cannot be formed for treatment.) Instruction takes place in both large and small groups. In addition, a large part of the time is devoted to independent study, especially for high achievers.

A modified Trump Plan is followed in delegating groupings. Large groups for the purpose of motivation and demonstration are formed approximately 20 per cent of the time, small groups are formed 30 to 50 per cent of the time, and independent study takes place 30 to 50 per cent of the time, depending upon the student's ability. Independent study includes programmed learning and the use of individual audio-visual equipment by children in a resource center.

Each day is divided basically into a modified modular schedule, each module or time unit being of fifteen minutes' duration. Scheduling thus may include lessons fifteen minutes long and some over an hour long. Each weekly schedule is established the preceding week by the unit leader and teachers.

Each unit, or team, holds two basic types of meetings. The planning meetings above mentioned are those at which time schedules are planned and groupings formed. It is emphasized that team planning takes precedence over team teaching "per se." Decision-making meetings are those at which broad plans are generally decided upon. Individual members or paired members present outlines for teaching units which they have developed, for acceptance by the group. Any re-working of these plans is accomplished outside these decision-making meetings.

Individualization is most readily apparent in the totally nongraded reading program. The mathematics program, particularly at the intermediate level, provides for a great deal of individualization. Each child works on one of eight strands at a time. Part of his time is spent working in a programmed, self-paced booklet; about which he confers daily with a teacher. Highest achievers spend more time per week working individually than do lower achievers, most of whose time is spent in structured lessons. Between these two extremes are the two-to-three member student seminar groups with whom teachers work. Time spent in these groups varies, again according to children's needs.

The danger of departmentalization at the intermediate level is eliminated: teachers are not required to specialize in one area. Presentation made to large groups are rotated, each teacher presenting lessons regularly. However, if one teacher is strong in a particular area, he does act as a consultant to the other unit members. Again, the emphasis is on group planning as a workable definition of the program in progress.⁵¹

⁵¹Interview with Mr. Nelson, Principal, Giese Elementary School, Racine, Wisconsin, December 20, 1967.

Interview with Leader of Instructional Unit D, Giese Elementary School, Racine, Wisconsin, December 20, 1967.

CHAPTER VII
EVALUATION

Characterization

The sampling of team teaching projects reported in this paper should serve to re-emphasize the great diversity in methods of organization and aims that now exists throughout the country. Similarly, many projects undertaking to evaluate their effectiveness tend to publish descriptive and testimonial material. Glen Heathers conducted a review of research on team teaching, which appears as a chapter in Shaplin and Olds. He states that, in general, there is a lack of well-designed research; that which is conducted does not follow general research guidelines and so, yields limited, if not uncertain results.¹ Little attention is paid to basic rationale and theory. There is limited application of appropriate research strategies to questions requiring answers.²

Research is complicated primarily because team teaching projects often involve two or more complementary or merging arrangements. Various combinations of non-gradedness, regrouping, cooperative teaching, non-professional assistance, and the use of technical aids, are found among the projects in operation.

¹Shaplin and Olds, pp. 306-44.

²Robert A. Anderson, "Organizational Characteristics of Education: Staff Utilization and Deployment," Review of Educational Research, XXXIV (October, 1964), p. 455.

An example of this is a statement by Wynn and DeRemer which concludes that, in programs studied,

there was insufficient evidence on the crucial question of whether the subdivision of the teaching function into specialized parts assigned to individual members of the instructional team is a more productive use of teaching time and talent than the traditional unity of the teaching function as manifest in the single teacher classroom unit.)

Thus, the projects generally are not designed to measure separately the contributions to instruction made by each of these features of team teaching; they do not isolate these variables. Herein lies the major weakness of research done on the projects.

A number of instruments of evaluation have developed within the context of team teaching. Too often, however, the instruments used by projects are those designed for conventional teaching programs and are incapable of measuring or discriminating between the specific aspects of team teaching, such as the type of learning in large and small groups and the effectiveness of each.

Projects usually choose from among a variety of instruments when establishing an evaluation program. Examples would be the basic standardized tests of achievement and maturity, questionnaires, anecdotal records, teacher time studies, principal's records, team leader reports, master teacher reports, counseling and guidance team reports, and

³D. Richard Wynn and Richard W. DeRemer, "Staff Utilization, Development, and Evaluation," Review of Educational Research, XXXI (October, 1961), p. 394.

analysis of subject area examination data.

Major criticism is directed at standardized achievement test results. They are limited in ability to measure mastery of generalization; they cannot measure the quantity or quality of verbal and non-verbal interaction in the small group. These limitations exist under any program relying primarily upon standardized tests and they are generally recognized by educators. However, one source states that "it is critical that, at an early stage, a team teaching program be able to demonstrate clearly and honestly that pupils do at least as well as they would in a conventional program."⁴

There are inherent limitations also, in the attitude scales so often used to evaluate both team teaching and conventional programs. Although they are easy to administer, results usually have a wide degree of variation. They tend to be more reliable when administered several times a year.

According to Olivero, the standardized achievement tests used in conjunction with attitude scales are the surest guidelines to administrative action. He does place some requirements on their use. Only if the achievement tests yield scores equal to, or higher than those yielded in conventional programs, can attention then be given to specific objectives; thus, achievement is a primary concern. Attitude scales must

⁴Bair and Woodward, p. 188.

be administered regularly, and it must be recognized that while a generally positive attitude is necessary, it is not in itself a sufficient measure of success.⁵ These tests should give both objective and subjective professional evaluation.

In spite of the wide recognition of limitations, not only of standardized tests and attitude scales, but of any evaluative devices, they continue to provide much useful information. The reports issued by various schools and school systems engaging in team teaching are based largely upon the two evaluative devices discussed. The majority of these reports state recognition of the limitations within which evaluators are working when presenting results. It can be generalized that conclusions reached are positive, both when objectively and subjectively based.

Results and Recommendations Reported by Projects

Stanford, Illinois

One limited study was conducted on sixty-six first grade children from the public school system in Stanford, Illinois. Reading achievement was compared under two types of classroom organization. The experimental group of thirty students was directed by a team of two teachers working as a unit. The control group of thirty-six students was directed by two teachers working singly in the conventional classroom.

⁵Beggs, p. 114.

The experiment was conducted for nine months; intelligence and reading achievement tests were administered during the last month.

The experimental class was grouped and sub-grouped for instruction by reading ability. The control classes were divided homogeneously by reading ability into three groups.

Results show that, as whole groups, no statistically significant differences appeared in the test results: superior students made no significant gains; average students in the team teaching group scored higher on word recognition than did those in the control group; boys in the team situation showed greater gains in word recognition; and girls revealed the greatest number of significant differences, those in the team taught group scoring higher in word recognition, paragraph reading, and reading averages.

The study reports difficulty in segregating reading instruction from other facets of the program and suggests that other measurements be made. No general conclusions are warranted from the information.⁶ This illustrates the importance of research methods and the intensive study required for even such limited experiments as this.

⁶Henrietta Rapp Peases, "Team Teaching: Effect on Reading Achievement in the First Grade" (unpublished Master's dissertation, Department of Education, Illinois State University, 1964), pp. 37-48.

North Lima, Ohio

A contrast might be drawn between the previous illustration and this. In the North Lima Elementary School, three first grade teachers planned a team approach for sixty-five students. Students were brought together once or twice a week for concept presentation. Groups were exchanged frequently to evaluate progress and assess areas where emphasis was needed.

According to June J. Slobodian, these benefits were derived from this approach:

With the use of the team approach more direct attention was given to different abilities of both teacher and pupils. This approach pushed the teachers out of their rooms and into a search for better knowledge and adaptation. Each spurred the other on to look for better ways of approaching the teaching-learning situation. Their optimistic attitude was conveyed to the children.⁷

This article is representative of many of those presented previously and serves to point up the way in which experiments and projects are generally reported. It is helpful to regard opinion and observations as such. They are useful to a degree; at the same time, they are wholly subjective. The accurate interpretation of participants' attitudes is paramount.

⁷June J. Slobodian, "Team Teaching Experiment Proves to Be Effective," Ohio Schools, XLII (February, 1964), p. 27.

Skokie, Illinois

A partial evaluation of this team teaching program at Devonshire Elementary School is concerned with students' attitudes. The reactions of ten students--six girls and four boys--chosen at random from the sixth grade, are reported. These reactions are recorded from individual twenty-minute interviews conducted with each of the chosen students.

All sixth grade students had been under the guidance of a team comprised of a leader, two regular teachers, and four certified part-time teachers aided by a full-time clerk. Class sizes ranged from seventy-five students to small groups of four or more students. Most grouping was based on achievement and ability as measured by standardized tests and the teachers' judgment.

The findings from the interview are as follows:

- 1) In the beginning, students adjusted quickly, although initially overwhelmed by the situation.
- 2) Students most favored opportunities of being in small groups and of having different teachers.
- 3) Students least favored the homerooms' having seventy-five students; they felt it to be overcrowded.
- 4) Students prefer team teaching over the self-contained classroom.⁸

The evaluation cites other studies which have found that elementary school children have high positive feelings about team teaching; they conclude that this report supports these previous findings.

⁸Galen M. Jarvis and Roy C. Fleming, "Team Teaching as Sixth-Graders See It," Elementary School Journal, LXVI (October, 1965), pp. 36-39.

Lexington, Massachusetts

The 1962 achievement test results in the Lexington Public Schools were encouraging, although the national norms were adjusted upward an expectation level in order to reflect the superior Lexington students. Again in 1963, the California Achievement Test results were above expectation in most subject areas and group achievement levels at each grade, one through six.

The results at the Franklin School reflect the trends shown in the system:

- 1) Grade one: all grouping levels met or exceeded the adjusted norms except in reading comprehension for the students in the lowest quarter of the group; however, their expectancy level is high due to the overall IQ distribution of the first grade.
- 2) Grade two: the top quarter averaged seven months higher than expected; the remainder of the group met or exceeded the expectancy level (allowing standard error).
- 3) Grade three: students were above the expected norm in all areas at all levels; the expectancy in the overall score was exceeded by six months to one year.
- 4) Grade four: all students met or exceeded expectancy; especially high scores were made by the upper quarter of the class.
- 5) Grade five: students met or exceeded the expected rates in all areas except spelling in the lowest quarter of the class; however, they showed a twenty-month gain.
- 6) Grade six: students met or exceeded the expected norms with a few exceptions; the lowest quarter grew but not up to grade level in arithmetic fundamentals or reasoning.⁹

The school district made the following conclusion regarding the results:

⁹Bair and Woodward, pp. 206-7.

Academic records of the team teaching schools, as measured by achievement tests, is excellent, and has shown a steady improvement each year for the past four years. These results cover a sufficient period of time to give assurance that the pupils are making above average progress.¹⁰

Attitude studies were made in the form of a questionnaire sent to the parents. Of those responding,

- 1) over 80 per cent felt that the Norwalk Plan met children's academic, emotional, physical and social needs;
- 2) approximately 90 per cent favored the mobility of the children, working with several teachers, in small groups, and at individual achievement levels.¹¹

Teachers' attitudes were stated as generally positive. Most favored the fact that they were freed from non-professional duties. Some felt that they had status advantages in the program.¹²

The Lexington Team Teaching Program (LTTP) claims both direct benefits and indirect benefits resulting from the various aspects of the plan. Direct benefits are those to the students which arise from group discussion and decision-making. Emphasis is placed upon matching the right students with the right teachers in relation both to subject matter competency and personality. Guidance and evaluation by the team as a group is believed to be of further benefit to each student.

Indirect benefits are those which should ultimately raise the level of the teaching profession. The creation of a personnel hierarchy is believed to facilitate recruitment of more

¹⁰ Ibid., p. 207.

¹¹ Ibid., p. 211

¹² Ibid.

competent people into the field of elementary education and to provide recognition and prestige to those assuming increased responsibilities.¹³

Norwalk, Connecticut

At the end of the first two years of operation of the Norwalk Plan, the Stanford Achievement Test battery was administered to students in team teaching situations and those in conventional classrooms at corresponding grade levels. The results showed that in all but nine of the forty-eight tests, the students being directed by teaching teams made average or better than average gains.¹⁴

Studies of pupil adjustment show no evidence that the team teaching program is detrimental to personal social adjustment.¹⁵ Attitude surveys of the students show that four out of five were favorable toward having more than one teacher, receiving instruction in various rooms, being members of a large group; as many felt that they knew at least one teacher well; nine out of ten made as many or more friends as when in a self-contained classroom.¹⁶

¹³Ibid., pp. 16-18.

¹⁴The Norwalk Plan: A Two Year Study (Norwalk, Conn.: Norwalk Board of Education, September, 1960), p. 87.

¹⁵Ibid., p. 22.

¹⁶The Norwalk Plan of Team Teaching, Fifth Report, 1962-63 (Norwalk, Conn.: Norwalk Board of Education, 1963), pp. 23-26.

The conclusion drawn by the Norwalk District in 1961 stated:

The Norwalk Plan has been a catalytic agent for improved instruction in the entire school system. It has stimulated use of newer audio-visual devices and instructional materials. It has also fostered a more concerned effort on curriculum revision, improved instructional techniques, more flexible grouping practices and more cooperative effort on the part of teachers not directly participating in team teaching. In short, the plan has had many positive effects both within and without the program.¹⁷

Oceano, California

The project administered the California Test of Mental Maturity both before and after the team teaching experience. Gains in reading, arithmetic and language were measured and compared. The California Test of Personality was administered in the same manner to test the effects of the program on children's personal and social adjustment.

In order to analyze results, each class was divided into groups on the basis of scores the students received on the mental maturity test. The group that received initial high scores was expected to exceed the group that received low scores in the areas of achievement listed above.

The second grade results of 75 students after five months with three teachers:

¹⁷The Norwalk Plan of Team Teaching, Third Report, 1960-61 (Norwalk, Conn.: Norwalk Board of Education, 1963), p. 7.

- 1) overall mean achievement growth of seven months in reading, arithmetic, and language (growth in language slightly greater than in the other two areas).
- 2) progress of high achievers greater than that of low achievers when comparisons based on growth expectancy rates.
- 3) slight overall gain in adjustment scores for the total class (brighter students scored slightly higher).

The fourth grade--results of 65 children after nine months with two teachers:

- 1) average mean growth of nineteen months; greatest gains in arithmetic (21 months) and language (20 months); reading gains lower (15 months)
- 2) both ability groups have exceeded expected growth rates
- 3) all children maintained their adjustment level

The sixth grade--results of 65 students after six months with two teachers:

- 1) overall mean gain of seven months; greatest gain in arithmetic (7 months); expected gain in language (6 months); two months behind expected norm
- 2) high achievers' mean gains approximately the same as those of low achievers; greater gains by high achievers in arithmetic
- 3) little change in personal-social adjustment

The ability to adjust to large groups and more than one teacher: personality test results and teacher judgments reassuring. "We are satisfied that elementary-school children are capable of behavioral adjustment to classes larger than the typical class taught in the one-teacher classroom."¹⁸

¹⁸ Adams, Elementary School Journal, LXII, p. 210.

Evaluation by fourth and sixth grade students on unsigned questionnaires: definitely favored team teaching; recognized advantages of having more than one teacher; behaved better in class; liked school and subjects more; studied harder and learned more in the subject areas; and made more friends. Asked if they would prefer classes under more than one teacher the following year: 67 per cent of the fourth graders and 40 per cent of the sixth graders replied positively; 10 per cent of the fourth graders and 25 per cent of the sixth graders replied negatively; and the rest had no preference.

Evaluation by parents--indicated on questionnaires sent to parents of fourth grade students: 78 per cent preferred the program for the next year; 12 per cent preferred the conventional program; and 10 per cent had no preference. General enthusiasm and interest demonstrated: volunteer mothers; large parent-teacher conference turn-out; visits to classrooms. Most favored team teaching; they said that children were more interested, progressed further, and had more friends.

Evaluation by teachers as indicated by personal interviews: one second grade teacher, one fourth grade teacher, and two sixth grade teachers fully supported team teaching; the other three teachers were less enthusiastic but willing to continue, with certain changes, i.e., soundproof movable walls.

Co-teaching has excited us out West. We are confident that team-teaching is here to stay. We have found that it offers many solutions to

the problems of elementary education. All the evaluation instruments we used point up the success of our project.¹⁹

Wisconsin

It should be recalled that the purposes of the R & I (research and instruction) Unit is to execute its functions in the school in addition to its functions in research, development, innovation and diffusion. In field testing the units to determine their effectiveness, the following kinds of information were gathered during the 1966-67 school year:

- 1) characteristics of children upon entering the Unit
- 2) characteristics of children toward the end of the school year
- 3) characteristics of the instructional program, personnel, facilities, and equipment available to the units
- 4) characteristics of the school system
- 5) relevant conditions in the home and community related to the educational program.²⁰

The authors are of the opinion that the R & I Units are executing these functions extremely well. Standardized tests indicate that students learn at least as well or better than those in self-contained classrooms. The units are involved in controlled experiments and research; emphases in such experiments are on improved instruction through individualization and the establishment of more adequate motivational techniques. "In every unit materials and activities different from those in self-contained classrooms are being used."²¹

¹⁹Ibid., p. 211.

²⁰Klausmeier, et al., p. 15.

²¹Ibid., p. 16.

They further report that participation in the activities is accompanied by high enthusiasm on the parts of the teaching staff, building principals, and central staff. There appears to be strong commitment to the improvement of education; many more hours than usual are spent by the staffs in research and development aimed at educational opportunities. There is recognition of limitations of subjective evaluation:

The effects cited above require further validation, and the field testing will continue through the 1967-68 school year. It may be that the most efficient pupil learning and greater enthusiasm on the part of the staff represent the Hawthorne effect. A principal goal of both the R & D Center staff and the local school staff is to develop and maintain higher enthusiasm and greater commitment on the part of both the children and the teachers toward the improvement of learning efficiency.²²

Basic evaluation of the concept of the R & I Unit is being undertaken in the form of simple measurement, controlled research, and teacher judgment. Fall and spring scores on standardized achievement tests are considered the major indications of the effect of the units on student learning. In most cases similar information is secured in control schools chosen to be as much like the R & I schools as possible. When substantial differences exist between R & I schools and control schools, gain scores of the former alone are analyzed.²³ The following results are reported by the R & I Units:

²²Ibid.

²³Klausmeier and Quilling, p. 2.

- 1) Manitowic--fourth grade unit; research conducted on individualization of spelling; the average standing relative to other fourth graders in the nation was at the 58th percentile in the fall and at the 74th percentile the following spring; substantial improvement shown.
- 2) Janesville--sixth grade unit; mean achievement in spelling and language: below the grade level expectancy in the fall; though control group was superior in I.Q. and achievement, R & I students made average gains as large or larger than the control school students; the R & I students progressed from below average to above average while in the R & I Unit.
- 3) Milwaukee--fourth and fifth grade unit; control group nine points higher in mean I.Q.; ranked in the 30th percentile in achievement tests in the fall; unit children ranked in the 20th percentile yet made greater gains in vocabulary and arithmetic concepts than did the control group.
- 4) Racine--fifth grade unit; disadvantage to control and unit children; initially comparable scores; in the spring R & I children did significantly better than the control children in seven out of nine achievement tests; unit group median gain was seven months, closer to the grade norm.
- 5) Madison--second grade of a completely unitized school; the same test given in the fall and spring in a six-months period, thirteen and fifteen month vocabulary and comprehension gains shown respectively.²⁴

The authors conclude that the R & I Unit is facilitative to school-related research, development, and innovation. Five school systems operating R & I Units cited cases in which research led to extension of procedures and facilitated development of curriculum programs. The units are felt to provide the physical settings in which innovations can be carried on in conjunction with other functions of teaching teams.²⁵ In Milwaukee and Racine, motivational programs are being used primarily in inner city schools. In these schools the utilization of

²⁴ Ibid., pp. 4-5.

²⁵ Ibid., pp. 11-13.

individualized approaches in all units has thus far yielded positive results.

Although a few of the R & I Units were hampered by enrollments too small or large to justify their use, all other units are participating in at least one research or development activity. This and the positive test results indicate that, in spite of having to adjust to a new organizational pattern, teachers are able to provide "excellent instruction while pursuing research and development activities."²⁶

Research undertaken within the framework of the R & I Unit is illustrated by that done in the Manitowic Public Schools in 1966-67. Two separate experiments are reported.

Third grade students were grouped homogeneously for arithmetic instruction; they were compared with a control group of third grade students in a class of all ability levels. Results indicate that groups of average ability and achievement perform better in homogeneous groups; students of low ability and achievement perform better in heterogeneous groups; and children of high ability and achievement perform well in either type of group.

At the fourth grade level, an experimental group received individualized spelling instruction; they were compared with a similar group receiving traditional spelling. Both groups did well, but the experimental group gained 2.5 times the

²⁶Ibid., p. 5.

expected gain on a standardized spelling achievement test.²⁷

"The preceding results indicate that the R & I Units performed both the instruction and research functions well.... The staff was enthusiastic about the result of the developmental work."²⁸

Further conclusions are based on subjective data representative of the five participating school systems. Especially good results are reported by Milwaukee, Manitowic and Janesville R & I Units in inducting first year teachers. Discussion with team leaders, observations of demonstrations and large group lessons, and curriculum assistance are arranged within the units. Problems of preparation, discipline, and individual differences are dealt with more effectively due to the aid given the new teachers by other staff members.²⁹

David W. Darling sees "at least two kinds of expertise, other than that of subject matter, ...beginning to appear in the Wisconsin program."³⁰ He refers to the first kind as that

²⁷James L. Wardrop *et al.*, Research and Development Activities in R & I Units of Two Elementary Schools of Manitowic, Wisconsin, 1966-1967, Technical Report No. 35, University of Wisconsin (Madison: Wisconsin Research and Development Center for Cognitive Learning, June, 1967), pp. 7-8.

²⁸Ibid., p. 8.

²⁹Klausmeier and Quilling, p. 14.

³⁰David W. Darling, "Team Teaching: Wisconsin Improvement Program," NEA Journal, LIV (May, 1965), p. 25.

involving student guidance and intern supervision. The second kind is expertise in certain methodological processes.³¹

Madison, Wisconsin

A two-year project was established with an experimental group and a control group; two elementary schools serving lower socio-economic families were involved. The experiment included 350 students, 60 per cent at the Washington School and 40 per cent at the Longfellow School.

At Washington there were two sections established, twenty students in each, for grades one through six. Students were separated randomly into these sections, forming a control and experimental section per grade. The control classes remained in one part of the school and continued a modified self-contained classroom approach. Special teachers were available in art, music and physical education. The experimental group was organized into two multigrade teaching teams: primary (first through third) and intermediate (fourth through sixth). Flexible groups were formed by subject matter and student needs. Large group instruction was followed up with small group work and discussion.

At Longfellow there was one class per grade level. This control group was essentially the same as that at Washington. Classes in all groups were equivalent in mean intelligence as measured by the California Short-Form Test of Mental Maturity.

³¹Ibid.

Mean intelligence quotients were: Washington experimental group, 107.8; Washington control, 105.4; Longfellow, 107.5.

Primary and intermediate teams were organized on the hierarchical structure based on the model of the Wisconsin Improvement Programs. Each team consisted of two experienced teachers, one as team leader; two teacher interns; and part-time instructional secretary. No teachers were forced on the teams.

To counteract possible Hawthorne effects, all organizations [the experimental and control groups] were stimulated by university consultants and new teaching aids (teaching machines, overhead projectors, and tape recorders)... The hierarchical model seemed to work well. The fixing of responsibility seemed well-received and was certainly desirable from both administrative and instructional points of view.³²

Studies included those on discipline in the project.

Two former teachers were trained to observe discipline and given a basic list of infractions categorized from least serious to most serious. After ten training periods, "inter-observer reliability was established at .74."³³ Each team member was observed for three thirty-minute periods; each teacher in the control groups was observed for four such periods. There were twelve observations for each of the teaching teams and twelve each for the primary grades and intermediate grades of both control groups.

³²Lambert, Goodwin, and Wiersma, Elementary School Journal, LXVI, p. 31.

³³Ibid.

The results were tabulated and analyzed using the Kruskal-Wallis one-way analysis of variance by ranks. The results demonstrated that the particular school, with its pupil and its general attitude toward discipline, has more influence on discipline than the organizational framework. Only one difference was statistically significant: interns had significantly more disciplinary infractions than experienced teachers on the team. This finding partially verified a concurrent finding based on the Flanders interaction analysis, namely, that the team had a significantly larger number of discipline problems mainly because of the large incidence of such infractions when interns were teaching.³⁴

The following recommendations are made:

- 1) that the use of intern teachers is beneficial; teacher recruitment and in-service training are facilitated by the team model.
- 2) that it would be desirable either to add certified teachers to each team or to replace one intern per team with a certified teacher.
- 3) that teachers of self-contained classrooms be trained in team techniques as an in-service function, making replacements available when needed.

Results of the project are not conclusively positive:

- 1) Primary group--the experimental group showed greater mean achievement than the control groups.
- 2) Intermediate group--the experimental group showed less progress than the control groups; less time was spent on subject matter due to the silence and confusion evidenced in classroom interaction.

The last recommendation made shows the importance placed on accurate research:

Research on organizational structure is needed....
An obligation to use controlled techniques to assess the value of the innovation to the pupils.
Failure to evaluate carefully may result in adoption of procedures that are ineffective or detrimental.³⁵

³⁴Ibid., p. 32.

³⁵Ibid., p. 33.

Jefferson County, Colorado

The report describes evaluative procedures and results for a study made on staff utilization in 1959-60. A main source for evaluation was the communication of the reactions from team members and resource personnel. Their suggestions and criticisms were interpreted according to statistical procedures.

Data for the county varied, some showing significant differences favorable to team teaching situation, some showing no significant differences. Total results of the standardized tests administered throughout the county show a positive movement in the direction of achievement favorable to team teaching and schedule modification. This was interpreted as meaning that the teachers, once they are familiar with the program, utilize new patterns and procedures effectively. The educational opportunities for students increase proportionately.

Results showed that members of the teaching teams are supporting the program and that there is general acceptance of the experimental project among those involved. Adaptability measures of the personnel participating in the project are favorable. Interest in experimentation has increased dramatically from year to year.³⁶

The following is the conclusion drawn from the evaluation procedures utilized:

³⁶Lobb, pp. 30-31.

The conclusion was reached that the advantages of team teaching and schedule modification outweighed disadvantages. Evaluation showed that considerable progress was made in the effective utilization of professional time, use of material and personnel resources, the development of appropriate teaching procedures, promotion of good attitudes and morales in teachers and students, and provision of adequate facilities and equipment. It was apparent that no concept of class size was justifiable without the consideration of function, purpose, and procedure. Groups of all sizes were effective, but for entirely different learning situations.³⁷

³⁷Ibid., p. 31.

CHAPTER VIII
CONTROVERSY ON TEAM TEACHING

Team teaching has been a controversial issue since its inception in the 1950's. There are numerous issues raised and voiced by those connected with the teaching profession who doubt the claims made by team teaching advocates.

Weiss and Morris question whether four of the basic assumptions of the team approach are valid. They point out:

- 1) that team members will stimulate and be stimulated by their colleagues is contradicted by the fact that inflexible persons do not function well on a team simply because they are associated with persons with constantly changing personality structures;
- 2) that members will feel free to contribute information is questioned; the authors feel that members may have suspicion and fear that others will take credit for ideas expressed, and that philosophy behind contributions will be misunderstood and thus perverted
- 3) that the approach will result in a program more acceptable to the team is questionable if factions existing within the team continuously challenge this program
- 4) that teams are successful when each member holds a prestige position is true only if the effort is cooperative; team goals must come before personal glory.¹

Floghoft finds reason to question advantages professed by those advocating the team teaching approach. He counters the following:

¹Thomas M. Weiss and Mary Scott Morris, "Critique of the Team Approach," Educational Forum, XXIV (January, 1960), pp. 207-8.

- 1) The differing degrees of skills and knowledge possessed by teachers should be capitalized upon; however, team teaching may lead to attempts to produce differences within the staff where they may not actually exist.
- 2) Salary is used as reward and motivation; however, the emphasis here is too materialistic.
- 3) The young child in the self-contained classroom may over-identify with his teacher as a parent substitute; it can be argued that a child will do the same with one of the team members.
- 4) Children may suffer an educational loss if they remain with one inferior teacher for a year; the raising of professional standards should eliminate the inferior teachers.
- 5) Orientation for new teachers is provided; this is too supervisory and not beneficial to the students.²

The issues raised by the above two passages are indicative of the opinions expressed by many leaders in the education field. These are opinions, and, while accepted as such, they cannot be discarded. There are problems arising in team teaching programs, and a review of numerous articles written finds the following reasons for the opposition frequently expressed:

- 1) lack of sufficient evidence that present methods are inadequate
- 2) lack of in-service training and guidance of teachers
- 3) finding strong team leaders and appropriate means of compensation and prestige
- 4) finding teachers who can function harmoniously as a team
- 5) locating, training, and supervising teacher aides
- 6) inhibiting the freedom of creative and independent teachers
- 7) supporting morale of both team and non-team teachers
- 8) lack of appropriate and readily available facilities
- 9) lack of mutual planning time
- 10) impersonal stress on achievement³

²Ploghoft, pp. 219-22.

³Brownell and Taylor, Phi Delta Kappan, XLIII, p. 152.
Hillson and Scribner, p. D&W-12A.

Robert H. Johnson, M. Delbert Lobb, and Lloyd G. Swenson, "An Extensive Study of Team Teaching and Schedule Modification

It is questioned whether the increased effort required to control the many variables introduced by team teaching itself is worth the results to the achievement of the students. Authors say that disturbances of authority and status relationships, coordination of functions, changes in reward structure, and new patterns of communication may all have deleterious effects on those involved and thus, on the entire program.⁴ Perhaps Anne Hoppock makes the strongest statement in opposition to team teaching: "It might be more profitable in the long run, to risk the danger of acquiring a reputation for having a closed mind and turn instead to areas of research more devoted to substance, less to form."⁵

Basically, the issues revolve around both the substance and structure of team teaching. The validity of basic assumptions on which it rests is questioned; the practical difficulties which may be inherent in its structure are cited; the very term and the looseness with which it is frequently applied are criticized. The fear that innovations will become the goals of schools and school system undertaking a team teaching program is characteristic of the opposition being expressed.

in Jefferson County, Colorado," NASSP Bulletin, XLIV (January, 1960), pp. 91-2.

Polos, p. 53.

⁴Wynn and DeRemer, Review of Educational Research, XXXI, pp. 393-4.

⁵Anne Hoppock, "An Opposing View--Team Teaching: Form Without Substance," NEA Journal, L (April, 1961), p. 48.

However, as with every educational issue, it is not difficult to find strong advocates among members of the education profession and observers in the field. Essentially, the writings showing support for team teaching cite the following advantages as being those which accrue when such a program is successfully initiated and maintained:

- 1) Advantages for students
 - a) Students have opportunity to work to capacity in skill areas; because more skill level groupings are made possible, each child can be placed at the level at which he can achieve success.
 - b) The slow and gifted student are not neglected; the gifted can receive vertical and horizontal enrichment; the slow do not develop a sense of failure which would impede learning.
 - c) Students spend more time receiving instruction than in conventional classrooms.
 - d) Learning is more attractive and challenging; because of teacher specialization, presentations and groupings vary.
 - e) Better use is made of independent study time; students develop self-direction commensurate with their abilities.
 - f) Students develop responsible social behavior, they associate with a larger group of age-mates than in conventional classrooms.
 - g) They receive improved guidance; their seeds are discovered through planned exchange of information by the team members.
- 2) Advantages for teachers
 - a) Teachers' knowledge and skills are used strategically; specialization in areas of strength, while teaching in other areas as well, leads to more effective teaching without the handicap of departmentalization.
 - b) Teachers receive practical in-service education when working on a team; responsibilities are assigned appropriate to teachers' capabilities.
 - c) Teachers have time for professional duties other than actual instruction; preparation and planning time is given a place in the school day.
 - d) Teacher morale is improved through cooperation with professional colleagues.

- e) Quality teaching results from teachers' keeping abreast of their fields.
 - f) Outstanding teachers receive recognition.
 - g) Salaries are raised to professional levels.
- 3) Advantages for administrators
- a) Team leaders may be used effectively in supervisory capacities; they work more closely with other teachers and can detect areas requiring attention.
 - b) Communication between teachers and administration is facilitated and improved.
 - c) Organizational problems are often solved in teams.
 - d) Better and more frequent use is made of instructional materials and devices.
 - e) Substitute teachers can be used more effectively and are less descriptive to the program.
 - f) Fewer trained teachers are needed; some positions are absorbed by aides and special services.
 - g) It is easier to attract qualified teachers.⁶

Anderson sees team teaching as a step in the direction toward a completely nongraded plan.

One of the principal advantages of team teaching, and variants thereof, appears to be that it stimulates and fosters the further development of flexible grouping patterns and of the nongraded school. Probably this is due to the more careful analysis that team teachers tend to make of their responsibilities and also to the increased flexibility they enjoy in responding to pupils' needs.⁷

⁶Henry A. Becker, "Team Teaching," *Instructor*, LXXI (June, 1962), p. 44.

Beggs, pp. 51-4.

Brownell and Taylor, Phi Delta Kappan, XLIII, p. 151.

Chicago Public Schools, Guidelines..., p. 34.

Ford Foundation, Time, Talent and Teachers, pp. 13-19.

Hillson and Scribner, p. EN-4A.

Stoddard, pp. 46-7.

Trump and Baynham, pp. 51-3.

⁷Hillson and Scribner, p. ASN-3A.

Perhaps the major reason supportive of team teaching is its role as a "catalyst for change."⁸ As an organizational approach permitting flexible scheduling, grouping, and utilization of staff and space, it makes necessary the analyzing of both content and instructional procedures. It thus provides a setting for the introduction of major educational innovations and stimulates greater coordination in the effort for curriculum improvement.⁹

⁸Ibid., p. HTS-6A.

⁹Henry J. Hermanowicz, "An Overview of Team Teaching," Illinois Journal of Education, LII (November, 1961), p. 34. Hillson and Scribner, pp. FCR-8A, HTS-6A. Polos, p. 68.

CHAPTER IX
SUMMARY AND CONCLUSION

The present educational era has been labeled one of experimentation based upon needs created by such prevalent conditions as the critical teacher shortage, the vastly expanded instructional content, and new insights into child growth and development. As a combined force, these conditions have had a direct effect upon education as a whole, and particularly upon the elementary school. It is within the framework of the elementary school that much experimentation involving team teaching has developed.

It is true that the team teaching concept has received nationwide attention, particularly since the latter part of the 1950's. In 1958, John I. Goodlad enumerated a range of possibilities seen as being created by team teaching, and wrote:

It is exciting to contemplate the elementary school of 1968--the school that a decade of experimentation may well produce in your neighborhood and mine!¹

In retrospect, perhaps this was too optimistic a prediction. While controversy has developed on a national level, team teaching itself has remained a local phenomenon; that is, it has received local support, financial and otherwise, and has been applied in accordance with local situations.

¹Goodlad, Elementary School Journal, LIX, p. 17.

The team approach, as implemented, is influenced by the local interpretation given it. In turn, the existence of team teaching may affect the elementary school organization to varying degrees. With limited implementation no more than one grade level may be affected and organizational changes remain horizontal. In sophisticated approaches, teams may cross one or more grade lines in carrying out their responsibilities for certain groups of children; thus, the school organization is affected horizontally and vertically. The partial elimination of grade lines is based upon the team responsibility of providing for individual differences in learning. Frequently then, team teaching effects the complete reorganization of the elementary school and may be instrumental in the development of the nongraded school.

It has been shown that the existence of team teaching may or may not result in complete reorganization; in any case, it requires the redefinition of certain personnel roles. Again, the extent to which this occurs depends upon the complexity of the organization. In certain cases, only the teachers at one grade level and the administrator must reassess their position. In others, not only are the immediate team members and the administrator concerned with changing roles, but with the definitions of newly created ones. The levels of responsibility, authority, and status within the school must be clearly stated; each member must understand the scope of his role and its relationship to all others in the

school.

The teaching team itself must be operational; that is, it must be composed of members who will work effectively as a group. The team is confronted with a new range of decisions which in turn affect planning and means of evaluation. Because children themselves change necessarily in the learning process, continuous evaluation by the team must be the basis upon which organizational changes are made. Thus, grouping and scheduling, both of which are organizational aspects of team teaching, are based upon the needs of individual children and are subject to immediate, as well as long-range changes. The emphasis, then, is upon flexibility in organization which is dependent upon those determining the program.

Anne Hoppock asks, "Should not the creation of problems so costly in human resources and perhaps money be offset by quite superior learning outcomes?"²

This question is pertinent; however, the outcomes desired are of such a nature that they cannot be effectively isolated and measured. The project reports have shown that the standardized test results for children participating in team teaching programs are generally equivalent to or higher than those for children in conventional classrooms. Attitudes and adjustment of those involved, teachers and students

²Hoppock, NEA Journal, L, p. 48.

alike, are generally positive. The changes are not dramatic, nor should they be expected to be so. There are expected results which have yet to be evaluated: critical thinking, independent problem-solving, competence in social relationships, the sense of individual responsibility for learning, and the active desire to learn. Thus, the individual child's development is the concern of the elementary school, and it must not be subordinated to any form of organization.

Evaluation of the team teaching program at this educational level in particular cannot be that of an isolated entity. It is an intrinsic part of the entire program as based upon the goals and philosophy of the elementary school. The opposition expressed toward it appears to be directed mainly to the misuse or misinterpretation of the term. This is a danger; it is of paramount importance that team teaching not become an end in itself. Perhaps the nature of its purpose is most clearly expressed by Goldstein:

Team teaching begins, through a vigorous attack on an amelioration of its problems, to provide a continuous vehicle for teachers growth, student learning, teacher involvement in key academic decision-making, teacher status, sound research, and modern evaluation. Team teaching is a continuous "action" device, one whose problems may even provide the source of its major strength.³

This reference to team teaching as a vehicle is significant: of itself, it will not guarantee the attainment

³William Goldstein, "Problems in Team Teaching," Clearing House, XLII (October, 1967), p. 86.

of educational goals. It should, however, provide the structure for an environment in which faculty and administration can more effectively work toward their stated objectives. Its value then, lies in how productively educational problems are attacked through it as an overriding structure. This is dependent finally upon the personnel involved--the acumen with which their talents are utilized and the dedication with which they work.

Ultimately, the individual teacher determines the quality of elementary education. It is his responsibility to guide children in the acquisition of academic skills and knowledge, while developing their desire to learn, their increasingly effective citizenship, and their sensitivity to other people.⁴ The teacher, professionally trained, must be sensitive to children and value their uniqueness as individuals.

The teacher, then, will be able to perform his function more fully and fruitfully when given the most effective tools with which to work. No one development in education has yet been found that provides an optimum environment for all teachers, for they, too, are unique individuals. Thus, experimentation continues; evaluation continues; and controversy continues; these are necessary and desirable. It is hoped that team teaching will be seen in the proper perspective.

⁴Beggs, p. 158.

It is not the only answer, but one of many. It can and should continue to make the contributions it offers to the attainment of the goals of elementary school education.

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APPENDIX

Bell Elementary School
Weekly Schedule for Departmental Level Team

DEPARTMENTAL TEAM TEACHING

TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:30		Social Studies Team Planning		Language Arts Team Planning	
9:00		Eighth Grade Science Planning Eighth Grade Social Studies Mrs. Gouletas, Chairman; Miss Nocek, Mrs. Bellini, Mrs. Murner, Mrs. Breiner			
10:40		Phy.Ed.8th Mr.Thiede,Mr.Ringstrom	Art-Bl.-306 Mrs.Murner,Mr.Tomita		Special Interests Teams
	Eighth Grade - Language Arts - Skill - Mrs. Kiel, Chairman; Mrs. Bellini, Mrs. Smolin, Mrs. Goldstein				
11:20			Art-Blind Mrs. Murner,Mr.Tomita		Special Interests Teams
	Seventh Grade - Language Arts - Skill - Mrs. Kiel, Chairman; Mrs. Bellini, Mrs. Smolin				
1:00	Seventh Grade - Social Studies - Miss Nocek, Chairman; Mrs. Gouletas, Mrs. Bellini, Mrs. Marcus, Mrs. Breiner Eighth Grade - Science - Mr. Schertler, Miss Conner Seventh Grade - Mathematics - Team Planning - Mrs. Amsel, Mrs. Smolin, Mrs. Griffin				
1:45	Art-Bl.-202 Mr.Tomita,Mrs.Marcus			Phy.Ed.-8th Mr.Ringstrom,Mr.Thiede	
	Social Studies Planning			Social Studies Planning	
	Seventh Grade - Mathematics - Mrs. Amsel, Mrs. Smolin, Miss Nocek				
2:30	Art-Bl.-202 Mr.Tomita,Mrs.Marcus	Social Dancing Mr.Thiede, Mr.Ringstrom	Square Dancing Mr.Thiede, Mr.Ringstrom	Phy.Ed.-8th Mr.Thiede Mr.Ringstrom	
	Phy.Ed.-8th Mr.Thiede,Mr.Ringstrom		Science Planning-7th		
	Eighth Grade - Mathematics - Mrs. Amsel, Mrs. Bellini Seventh Grade - Science - Mr. Schertler, Mrs. Smolin, Mrs. Griffin				

Bell Elementary School
Weekly Schedule for Intermediate Hard of Hearing

TEAM TEACHING - INTERMEDIATE HARD OF HEARING - EIGHTEEN PUPILS

LEADER: Margaret O'Gara; MEMBERS: Jacqueline Marlowe, Priscilla Brittin (1/2 time)

PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
9:00	Opening Exercises (Language Arts-Spelling	Opening Exercises A-P.E.Boys,Lib.Girls	Opening Exercises	Opening Exercises A-P.E.Girls,Lib.Boys	Opening Exercises
9:05	Language level-speech composition) (B-309) A-315(O'Gara)(Marlowe)	M.O'Gara-Planning B-same as on Monday	Same as on Monday	O'Gara-Coach T.Van B-P.E.Boys 309-speech-Girls	Same as on Monday
9:45	Continue as above	A-L.Arts-315 B-speech=Boys 309 P.E.-girls	Same as on Monday	A-315-L nguage Arts B-Library-Girls Speech-Boys 309	Same as on Monday
10:40	Reading-Group "O"-220 Group "B"-315 Group "M "-309	Same as on Monday	Same as on Monday	Same as on Monday	Same as on Monday
11:20	S.Studies-Brittin A-315 (less T.Van.) Lib.(5 from 309) 309-Spec.Rdg.2 grps. O'Gara & Marlowe	A-S.Studies-315 Brittin B-S.Studies-309 Marlow O'Gara-L.Arts-Tutor.	S.S.-315 Spec.Rdg.-same as on Monday - 309 O'Gara-Marlowe	Same as on Tuesday	315-S,S.Brittin 309-Rem.Rdg.SRA Marlowe-O'Gara
12:00	Lunch - 12:45				
1:00	Aud.Trg.-113 (Tom L., Larry D, Chas.B, Nona R, Marilyn O, Tony G, L.Arts-Tutor.M.Sasso, J.Lulias,T.Vanderkamp 315-with O'Gara Marlowe-309-Science	O' Gara-Science TV (316) Marlowe-Math.5th 315 (3-study)Sasse, Lulias,T.Van. 309 O'Gara,Super.113(3)	315-Science-TVfollowup 113-Aud.Trg.-Sasso, Lulias,Vanderkamp 309-Science	315-Science-Study Maria,John, Tom Van. 309-Math.-5 Aud.Trg.Sandra H, Steven R, Sandra G	113-Same Monday 315-(3)+309 Art 309-Alter.Swin.& Art Marlow & O'Gara (Team Teaching) Speech-Language Art
1:45	Brittin-Math.4-309 O'Gara-Math.6-315 Marlowe-(planning) Aud.Trg.(Richard K, Donald E,Scott I,Ave S Jeff,Ronald K-113	O'Gara-Math.6-315 Brittin-Math.4-315 Marlowe Math.5-309	O'Gara-Math.6-315 Brittin-Math.4-309 113-Aud.Trg.(Richard, Donald etc.(same as on Monday) Marlowe-Team Teaching	O'Gara-Math.6 Brittin-Math.4(315) Marlowe-Penmanship, Individual help(3)	Art-all 315 309-as above O'Gara-Marlowe Brittin-(planning)
2:30	Brittin-Tm.Tchg.- O'Gara-315-Science Coach Math.4 Marlowe-309-Math.5	Brittin-315-Tm.Tchg. Marlowe-Science 309 O'Gara-tutor.(SRA) M.Okobe,T.Gagliano	Brittin-Tm.Tchg. con- tinue Math.or Indivi- dual help (309-Math.5) O'Gara-Tutor (SRA)	315-O'Gara & Brittin Brittin-Tm.Tchg. Marlowe-Science 309	Art and Team Teaching

MODULE TIME	29	28	27	26	25	24	X	I
1. 8:00 - 8:15		Special Help						
2. 8:15 - 8:20		Planning						
3. 8:20 - 8:35		Miss	Mr. LaFave			Miss Pingitore		
4. 8:35 - 8:50		Ronda	Mr. Zaske			and Mr. Olson		
5. 8:50 - 9:05		Teacher	Mrs. Coyne			To plan		
6. 9:05 - 9:20		Mr. 2nd	Mrs. Robinson			for other		
7. 9:20 - 9:35		Group	Mrs. Tidemann			groups		
8. 9:35 - 9:50			will observe					
9. 9:50 - 10:05	Spelling	Spelling	Spelling	Spelling	Spelling	Spelling		
10. 10:05 - 10:20								
11. 10:20 - 10:35	LaFave	Zaske	Coyne	Olson	Pingitore	Tidemann		Roberson
12. 10:35 - 10:50	26	25	24	29	28	27		Hartnek
13. 10:50 - 11:05	Lang.	Lang.	Science Study	Ind.	Phy. Ed	Phy. Ed.		Roberson
14. 11:05 - 11:20	Hartnek	Zaske	Coyne	LaFave	Tidemann			Pingitore
15. 11:20 - 11:30	29	28	27	26	25	24		
16. 11:30 - 12:30	L U N C H							
17. 12:30 - 12:45	Special Help							
18. 12:45 - 1:00	Phy. Ed	Phy. Ed.	Independent Study	Lang.	Lang.			Coyne
19. 1:00 - 1:15	LaFave	Tidemann	Pingitore	Zaske	Roberson			Hartnek
20. 1:15 - 1:30	29	28	25	24	27	26		
21. 1:30 - 1:45	Hartnek	Zaske	Coyne	Roberson	Pingitore	Tidemann	LaFave	
22. 1:45 - 2:00								
23. 2:00 - 2:15	Arithmetic							
24. 2:15 - 2:30								
25. 2:30 - 2:45	Art	Art	Independent Study	Lang	Lang			Tidemann
26. 2:45 - 3:00	Coyne	Pingitore	LaFave	Hartnek	Roberson			Zaske
27. 3:00 - 3:10								
28. 3:00 - 3:30		Science Seminar						
		Special Help						

Giese Elementary School
Weekly Schedule for Instructional Unit B

	Monday	Tuesday	Wednesday	Thursday	Friday
Reading	21 (a) 21 (b)	6 7	11 - Rodina Concerts 10 - Pa Prince 1 ar, 13 " " 1 Rk.	2 3 4	
Math	p. 35 PP 40	p. 34 PP 46	p. 37 PP 41	p. 38 p. 36	p. 39 PP 49-50
Spelling	Unit 8 Parts 9 & B	Hand Writing	Unit 8 Parts C & D	Hand Writing	Unit 8 Test
Music	Self-Cont. Tune up Monos see p 5-7 T.M. Rev. Rounds p. 60-61-67 Song Story pp. 35-39	Semi-DR 12:45-11:15-Rooms 14-15-16 11:15-1:45 Rooms 10-11-12-13 (5) Tune up - Rev. 60-61-67 Teach p. 68 - overhead	Self-Cont. Tune up Rev songs - p. 60 61-67-68 Rounds: Are you sleep & Row Row	Semi-DR 12:45-11:15 Rooms 14-15-16 11:15-1:45 Rooms 10-11-12-13 (5) Teach p. 69 Rev p. 67-68 Tune ups	Self-Cont. Tune up Rev. Song Story Rounds pp-67-68-69
Science	Lesson 1 - Large Gr. L.C. film highL for Beginners	Lesson 2 - Semi in LC 12:45-11:15 - Rooms 10-11-12-13 1:15-1:45 - Rooms 14-15-16 filmstrip	Lesson 3 self Contained Shadows see plans	Lesson 4 - Semi LC 12:45-11:15 Rooms 10-11-12-13 11:15-1:45 - Rooms 14-15-16 Tape - Shapes and Shadows	Lesson 5 Large Gr - LC shadow Plays
My Ed.	16-14	15	16-14	12-11	16-14
Ind. St.	10-13	15	10-13	15	10-13
Art		15 11-12		15 11-12	
Long Arts	15 11-12		15 11-12		15 11-12
	16-14 10-13		16-14 10-13		16-14 10-13