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ABSTRACT

This study investigated various characteristics of the multiunit school and a seven-step Instructional Programing Model as they relate to home-school-community relations. Within this framework, the study had two objectives--to describe the characteristics of the multiunit school and Instructional Programing Model, and to analyze the interrelationships among those characteristics in terms of the allocation of economic resources, educational values, and power. Data were collected at two schools selected from eight schools participating in a home-school-community relations research project. Open-ended interviews were held with principals, unit leaders, teachers, aides, and parents to obtain substantive data regarding the operationalization of the multiunit school and the Instructional Programing Model in the two schools. Findings of the study supported two general conclusions. First, multiage grouping of students and instructional teaming were more successful than were other characteristics of the multiunit school, because they are more easily translated into tangible benefits. Second, conflict is more likely to result from differing educational values associated with the various characteristics than from their effect on the allocation of power or resources. (Author/JG)

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Technical Report No. 349 (Part 1 of 2 Parts)

AN EXPLORATORY CASE STUDY OF THE MULTIUNIT SCHOOL AND THE INSTRUCTIONAL PROGRAMING MODEL: POWER, RESOURCES, VALUES

by

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Report from the Project on Organization for Instruction and Administrative Arrangements

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WISCONSIN RESEARCH AND DEVELOPMENT CENTER FOR COGNITIVE LEARNING

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The mission of the Wisconsin Research and Development Center for Cognitive Learning is to help learners develop as rapidly and effectively as possible their potential as human beings and as contributing members of society. The R&D Center is striving to fulfill this goal by

- conducting research to discover more about how children learn
- developing improved instructional strategies, processes and materials for school administrators, teachers, and children, and
- offering assistance to educators and citizens which will help transfer the outcomes of research and development into practice

PROGRAM

The activities of the Wisconsin R&D Center are organized around one unifying theme, Individually Guided Education.

FUNDING

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ABSTRACT

The purpose of this study was to examine the interpretation of the characteristics of the multiunit school and the Instructional Programing Model as they related to home-school-community relations. The multiunit school is an organizational and administrative arrangement of staff and students that facilitates instructional programing for the individual student as well as other related Individually Guided Education practices. It consists of five underlying characteristics: multiage grouping of students, nongradedness, teaming, differentiated staffing, and shared decision making. The Instructional Programing Model is a cyclic seven step process used to plan, implement, and evaluate instructional programming for children. It has four underlying characteristics: instructional programing, continuous progress, criterion-referenced assessment, and preassessment.

Home-school-community relations was defined as the resolution of actual or potential conflict among various subpublics which may be associated with policy decisions or administrative practices which determine: (1) the use of scarce economic resources, (2) the value choices to be made regarding the educational program, and (3) the locus of power in the education enterprise.

Within this framework this study had two objectives:

1. To describe the characteristics of the multiunit school and the Instructional Programing Model.

2. To analyze the interrelationships between the characteristics identified in Objective 1 by identifying and describing each in terms of the allocation of (1) scarce economic resources, (2) educational values, and (3) power.

This case study was exploratory in design. Minimum criteria indicating an operational program of Individually Guided Education were used to select the two school sites used in this study. Data were collected through the use of in-depth interviews. An open-ended interview schedule was developed to obtain substantive data regarding the operationalization of the multiunit school and the Instructional Programing Model. Interviews were held with principals, unit leaders, teachers, aides, and parents. A data retrieval system, consisting of coded and notched key-sort cards, was devised to code and retrieve the data gathered during the interviews. Data were verified by two knowledgeable respondents from each of the two school sites.

Two general conclusions summarize the findings related to this study. First, the successful implementation and operationalization of the characteristics of the multiunit school and the Instructional Programing Model are related to the degree by which they can be translated into visible and tangible benefits easily interpreted by the various subpublics in the school community. In this study, it was found that two characteristics of the multiunit school, multiage grouping of students and teaming, had been translated into visible and tangible benefits. Consequently, the implementation of these two characteristics was more successful than those characteristics that were not capable of being translated into visible and tangible benefits.

Second, actual or potential conflict is more likely to result from differing educational values associated with the characteristics

than either their allocation of power or resources. The different values also hold the potential for conflict if issues arise in the school community.

CHAPTER I

BACKGROUND AND RELATED LITERATURE

Introduction

Nothing would be done at all
If a man waited
Til he could do it so well
That no one could find fault with it.

--Newman

Most American communities are composed of individuals representing a potpourri of ages, socio-economic backgrounds, and philosophical perspectives. The amalgamation of these individuals into a representative, cohesive group is a continuous task. Within this amalgamation process each group struggles to ensure that its ideas and beliefs are fairly heard, represented, considered, and valued. The struggles in education are no different. Schools serve communities that represent individuals of differing backgrounds, beliefs, and values. In recent years the role the community plays in the introduction of educational change has become increasingly evident. One has only to recall the controversies created by the introduction of sex education in the public schools, recent efforts at censorship of textbooks, and the use of the open campus at our high schools to support this contention.

The introduction of a major educational innovation that requires substantial changes in the schools' traditional policies and practices creates the potential for the disruption of the ebb and flow of interaction between the home, the school, and the community. Wirt and Kirst expressed their thoughts on the importance of communities and educational change in the following:

> Educational innovation that proceeds with no notion of what community values are, of who the guardians of this orthodoxy are, and of what resources they have is an empty exercise.[1]

The research presented here is an exploratory case study of selected components of a major educational innovation, Individually Guided Education. Specifically, the purpose of this research was to examine the interpretation of two components of the Individually Guided Education system, the multiunit school and the Instructional Programing Model, as they related to a third component, home-school-community relations. Individually Guided Education is defined as "a comprehensive system of education and instruction designed to produce higher educational achievement through providing for differences among students in rates of learning, learning styles, and other characteristics."[2] The multiunit school is the organizational and administrative

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[1]Frederick M. Wirt and Michael W. Kirst, THE POLITICAL WEB OF AMERICAN SCHOOLS (Boston: Little, Brown and Company, 1972), p. 70.

[2]Herbert J. Klausmeier, et al., INDIVIDUALLY GUIDED EDUCATION: GUIDELINES FOR IMPLEMENTATION (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, University of Wisconsin, 1971), p. 17.

arrangement created to facilitate instructional programing for individual students; it also provides the environment for other related practices. Differentiated staffing, multiage grouping of students, nongradedness, shared decision making, and teaming are characteristics of the multiunit school. The Instructional Programing Model is a systematic procedure designed to provide a framework for the development of instructional programs tailored to meet identified student needs. Instructional programing, continuous progress, preassessment, and criterion-referenced assessment are characteristics underlying the Instructional Programing Model.

Bowles and Fruth define an effective home-school-community relations program as "the resolution of both actual and potential conflict among various subpublics which may be associated with policy decisions or administrative practices which determine: (1) the use of available, scarce resources; (2) the value choices to be made regarding the educational program; and (3) the locus of power in the educational enterprise."[3]

This chapter consists of three sections. It begins with the development of Individually Guided Education and continues with a review of the literature and research related to the multiunit school, instruction and achievement, and implementation. The chapter concludes

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[3] B. Dean Bowles and Marvin J. Fruth, "Improving Home-School-Community Relations," in THE PRINCIPAL AND INDIVIDUALLY GUIDED EDUCATION, eds. James M. Lipham and Marvin J. Fruth (Reading, Mass.: Addison Wesley Publishing Company, 1976), p. 9 (In Press).

with a statement of the study's objectives and its significance.

Background and Research on Individually Guided Education

The research related to Individually Guided Education is presented in two sections. The research directly related to its development is presented first. Also in the first section is a description of the seven major components of Individually Guided Education. The second section presents the research that has been conducted since the initial development and implementation of Individually Guided Education.

Development of Individually Guided Education

The development of Individually Guided Education occurred as a result of a deliberate attempt on the part of the Wisconsin Research and Development Center for Cognitive Learning (R & D Center) to create an alternative form of education. Working directly with educational practitioners during the development of Individually Guided Education, the R & D Center employed a three-dimensional strategy:

> First, undesirable characteristics were delineated. Second, the corrective responses to these conditions, as well as the desirable characteristics, were then conceptualized in terms of a complete system which would be an alternative form of schooling. Third, the development, evaluation, and refinement of the system was an iterative process involving the cooperation of the personnel from the R & D Center, state education agencies, and local education agencies.[4]

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[4]Wisconsin Research and Development Center for Cognitive Learning, A Final Report to the National Institute of Education for Grant No. NE-G-00-3-0221, THE IMPLEMENTATION OF IGE: 1973-1974 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974), pp. 3-4 (Mimeograph).

In delineating the undesirable characteristics of the general educational environment that were preventing the development of an excellent instructional program for each student, it was found that:

1. Time was not available during the regular school day to engage in a building-wide instructional improvement effort.

2. Members of the teaching staff, because of identical work loads, were unable to carry out expanding responsibilities that took into account differences in their interests, experience, and capabilities.

3. There were no plans that would enable the principal and teachers of a school to plan, carry out, and evaluate an educational program which takes into account both the characteristics of the neighborhood and the requirements of the local school system or the state.[5]

Normative research was conducted by the R & D Center from 1965 to 1968. Specific research efforts were undertaken in five developmental school sites to describe the activities of the Research and Instruction Units (initially, it was research which was emphasized in the creation of the multiunit structure, hence the name Research and Instruction Units; subsequently, the emphasis was reversed and the units became known as Instruction and Research Units). The research focused upon staff

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[5] Klausmeier, et al., INDIVIDUALLY GUIDED EDUCATION GUIDELINES, pp. 4-5.

development,[6] homogeneous and heterogeneous grouping,[7] teaching methods,[8] individualization and motivation,[9] and achievement changes during the implementation of Individually Guided Education.[10]

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[6]Herbert J. Klausmeier, et al., INDIVIDUALIZING INSTRUCTION IN LANGUAGE ARTS THROUGH DEVELOPMENT AND RESEARCH IN R & I UNITS OF LOCAL SCHOOLS, 1965-1966, Technical Report No. 19 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1967).

[7]James L. Wardrop, et al., RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF TWO ELEMENTARY SCHOOLS OF MANITOWOC, WISCONSIN, 1966-1967, Technical Report No. 35 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1967).

[8]Doris M. Cook, et al., RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF TWO ELEMENTARY SCHOOLS OF JANESVILLE, WISCONSIN, 1966-1967, Technical Report No. 45 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1968) and Mary Quilling, RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF TWO ELEMENTARY SCHOOLS OF MILWAUKEE, WISCONSIN, 1966-1967, Technical Report No. 46 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1968).

[9]Herbert J. Klausmeier and Mary Quilling, eds., RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF FOUR ELEMENTARY SCHOOLS OF MADISON, WISCONSIN, Technical Report No. 48 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1968), and Herbert J. Klausmeier, Mary Quilling and James L. Wardrop, eds., RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF FIVE ELEMENTARY SCHOOLS OF RACINE, WISCONSIN, Technical Report No. 52 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1968).

[10]R. G. Morrow, Mary R. Quilling, and Frank Fox, STUDENT ACHIEVEMENT AND ATTITUDES IN INSTRUCTION AND RESEARCH UNIT IN TWO ELEMENTARY SCHOOLS IN JANESVILLE, WISCONSIN, 1967-1968, Technical Report No. 76 (Madison, Wisconsin: Wisconsin Research and Development Center For Cognitive Learning, 1969).

The results of that research and innumerable on-site observations enabled the R.& D Center to identify eight general observable conditions in the schools. The conditions were described as follows:

1. Attention was focused on the individual learner as a person with unique characteristics, concerns, and motivations.
2. Curriculum materials were selected to accommodate varying learning styles.
3. The basic instructional and administrative units were small enough to allow every staff member to be known and treated as an individual and large enough to permit role differentiation and complementarity of contributions.
4. There was a good reconciliation of the values of autonomy and accountability, small group responsibility, and intergroup coordination.
5. Teachers and other educational personnel employed problem-solving processes to satisfy the educational needs of individuals.
6. The educational program took home and neighborhood activities into account.
7. The school building was constructed or remodeled to facilitate Individually Guided Education processes.
8. Provisions for staff development were an essential part of the approach.[11]

The results of the research and on-site observations led to the conceptualization of Individually Guided Education as an effective alternative form of education.[12] Individually Guided Education is

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[11] Klausmeier, et al., INDIVIDUALLY GUIDED EDUCATION GUIDELINES, pp. 5-10.

[12] Wisconsin Research and Development Center for Cognitive Learning, FINAL REPORT: THE IMPLEMENTATION OF IGE: 1973-1974, p. 3.

composed of seven major components: (1) the multiunit school; (2) the Instructional Programing Model; (3) evaluation for educational decision making; (4) compatible curricular materials; (5) facilitative environments; (6) continuing research and development; and (7) home-school-community relations.

The Multiunit Elementary School

The multiunit school (see Figure 1) is the organizational component of Individually Guided Education and was designed to "produce an environment in which instructional programing and other components of Individually Guided Education can be introduced and refined."[13] The structural configuration of the multiunit school consists of three distinct organizational groups, each of which has its own decision parameters. At the district level, the Systemwide Program Committee establishes guidelines within which each of the district schools must operate. At the building level, the Instructional Improvement Committee concentrates its efforts on school-wide instructional concerns. At the classroom level, the Instruction and Research Unit is concerned with planning, implementing, and evaluating the instructional program for the children in the unit.

The multiunit organizational design consists of five distinguishing characteristics: multiage grouping of students, nongradedness, differentiated staffing, shared decision making, and teaming. Multiage grouping

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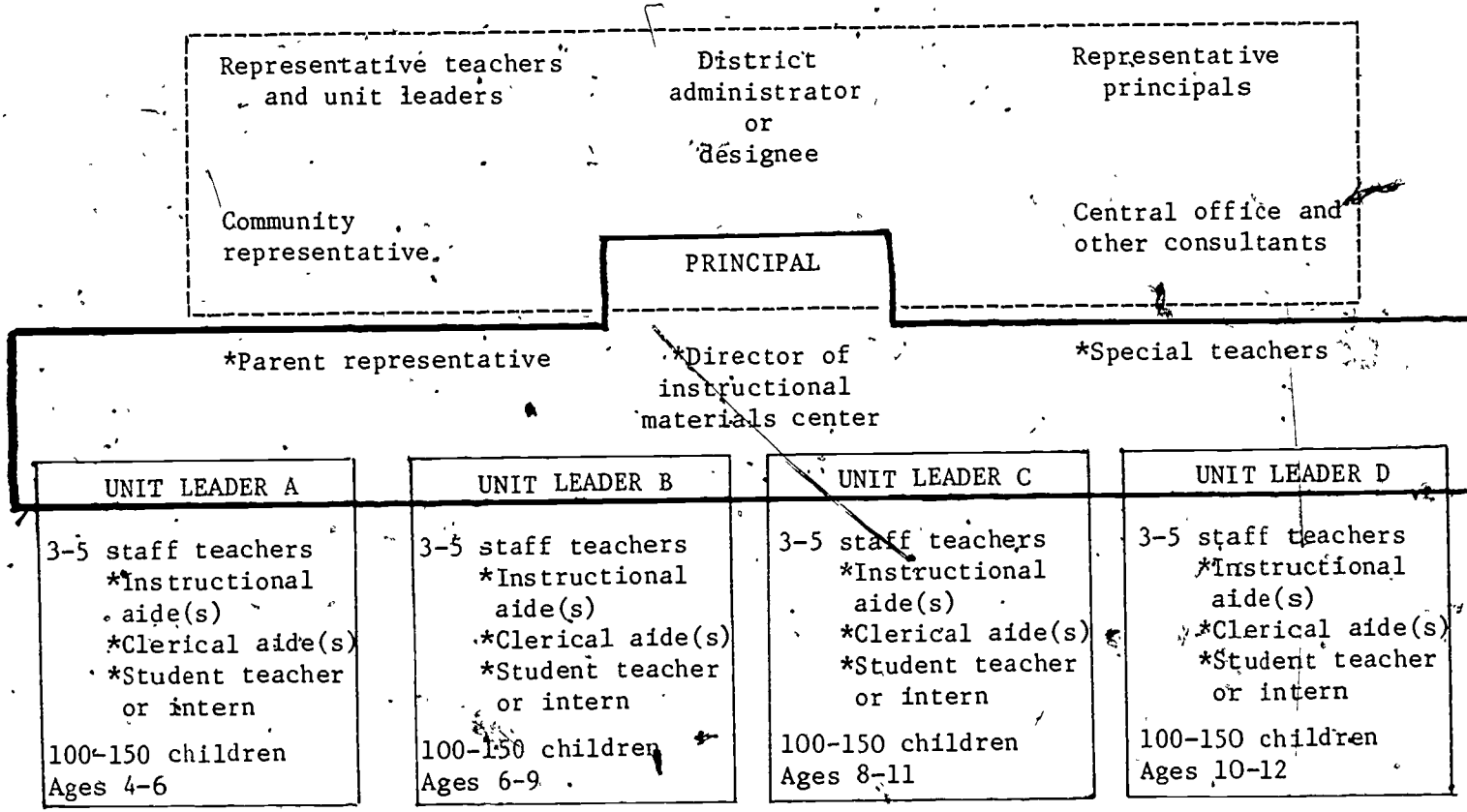
[13]Klausmeier, et al., INDIVIDUALLY GUIDED EDUCATION GUIDELINES, p. 20.

FIGURE 1

PROTOTYPE MULTIUNIT ORGANIZATION OF AN IGE SCHOOL OF 400-600 STUDENTS



———Instruction and Research Unit

▬▬Instructional Improvement Committee

-----Systemwide Program Committee

*Inclusion of these persons will vary according to particular school settings.

Source: Lipham and Fruth, THE PRINCIPAL AND INDIVIDUALLY GUIDED EDUCATION

of students is an organizational arrangement whereby students of different ages are assigned to each Instruction and Research Unit. The Instruction and Research Unit in the multiunit school usually encompasses a three- or four-year age differential. Multiaging results in students remaining within an Instruction and Research Unit for two or three years. While multiage grouping is considered an organizational arrangement, it does have instructional implications by creating an environment in which certain educational experiences can be provided that are normally restricted in the conventional age-graded classroom. For example, the greater number of opportunities for interaction between younger and older children increases the use of peer teaching techniques. In addition, having several teachers work with the children over a period of several years results in a more thorough understanding of each individual child.

Nongradedness is an organizational arrangement for the placement of students. Student placement normally consists of a series of one-year sequentially differentiated steps based upon the student's chronological age, e.g., grade one, grade two, etc. Nongradedness, then, is the absence of "sequential labeling" that characterizes the conventional age-graded elementary school. There is, however, a more subtle reason for adopting a nongraded structure. It has been the practice in the age-graded structure to create a graded curriculum as well. There is a first grade curriculum, a second grade curriculum, etc. Thus, the nongraded like multiage grouping, provides an organizational arrangement whereby an appropriate learning environment and instructional program can be established to facilitate instructional programing for the individual student.

Differentiated staffing has resulted in a redefinition of existing school roles and the creation of one new role, that of the unit leader. The description of each role is designed to facilitate a collaborative effort by which instructional programs can be planned, implemented, and evaluated. Underpinning the interwoven relationships in the differentiated staffing pattern of the multiunit school is the premise that the unit leader and the unit staff are key individuals in the instructional system.

Teaming is the collaborative relationship within a unit that is focused upon the planning, implementation, and evaluation of the instructional program for the children in the unit. This collaborative effort is facilitated by the differentiated staffing patterns as well as the shared decision making necessary within the multiunit school.

Shared decision making is created through various organizational structures with overlapping memberships. Three organizational structures within the school system support three decisional domains: The Instruction and Research Unit at the classroom level; the Instructional Improvement Committee at the school level; and the Systemwide Program Committee at the district level. The decisional framework is founded on several premises:

1. Decision making requires the systematic gathering of information.
2. The decisional structure is not a top-to-bottom linear sequence.
3. Shared decision making requires open communication.

4. The closer the decision is to the point of implementation, the more likely it is to be carried out in the way intended.[14]

The Instructional Programming Model

The Instructional Programing Model (see Figure 2) is a systematic procedure designed to provide a framework for the development of instructional programs tailored to meet individual student needs. Four characteristics underpin this model: instructional programing, continuous progress, preassessment, and criterion-referenced assessment. Instructional programing is defined by and accomplished through the application of the Instructional Programing Model. The cyclic seven-step process takes into account the pupil's beginning performance, his rate of progress, his style of learning, and other learner characteristics appropriate for the school's instructional program.

Continuous progress is an instructional arrangement where student progress is not based upon arbitrary sequencing, e.g., chronological age and years in school. Rather, instructional programs are determined by the learner's needs and accomplishments.

Preassessment is a procedure utilized to determine the instructional needs of each student. This practice is a departure from conventional testing procedures. The results of the preassessment are used to establish specific instructional objectives for each student and to aid in developing appropriate instructional activities that enhance the achievement of the instructional objective.

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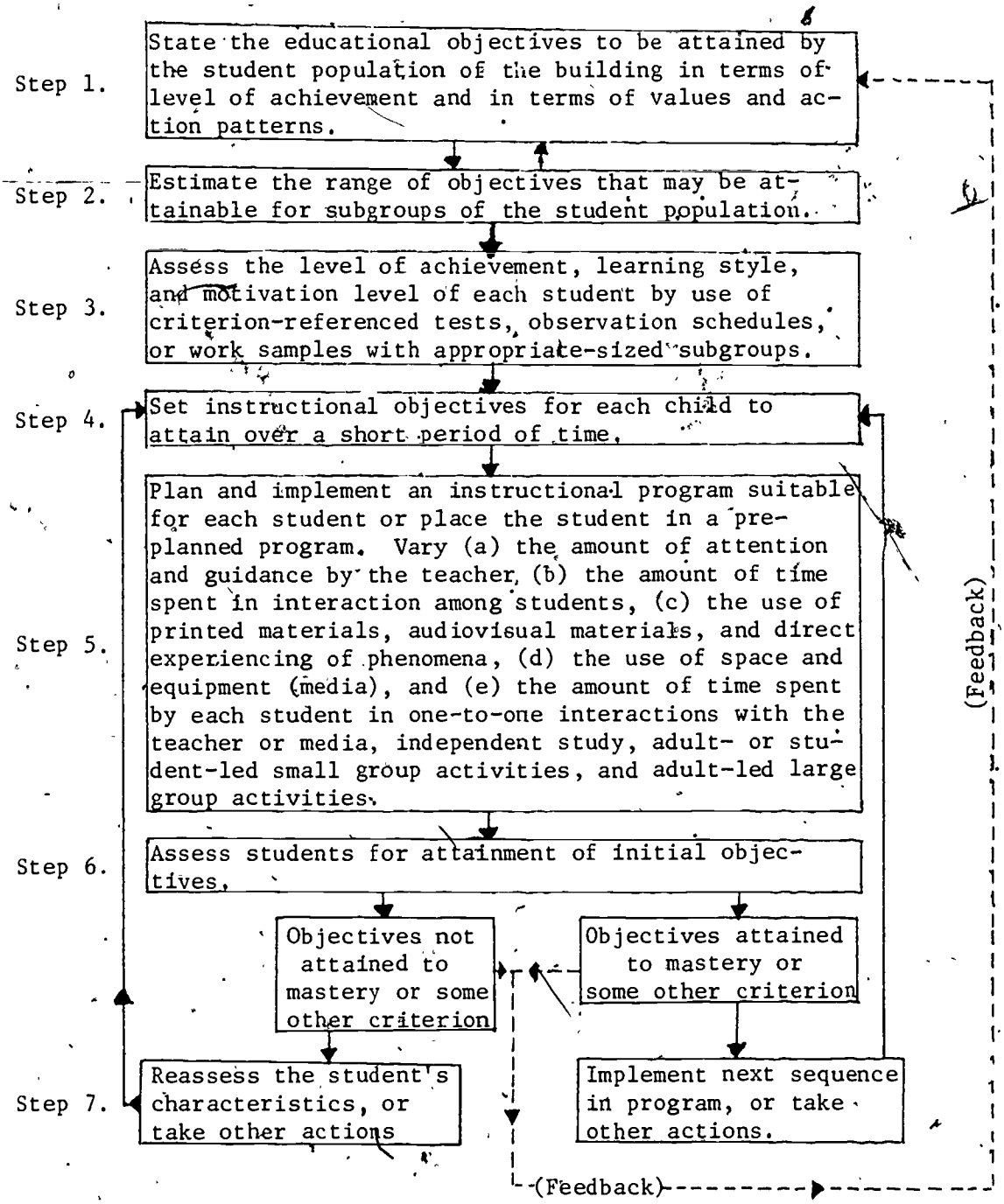
[14] Klausmeier, et al., INDIVIDUALLY GUIDED EDUCATIONAL GUIDELINES, pp. 24-25.

FIGURE 2

INSTRUCTIONAL PROGRAMING MODEL IN IGE



Source: Lipham and Fruth, THE PRINCIPAL AND INDIVIDUALLY GUIDED EDUCATION.

Criterion-referenced assessment means that a test measures the attainment of an explicitly stated behavioral objective. Success or mastery is achieved when an individual meets a specific criterion level; this differs from standardized tests, in which success or mastery is based upon some type of standardized norm derived from a specific reference group. The results of preassessment, using a criterion-referenced format, are an integral part of instructional decision making in the multiunit school.

Evaluation for Educational Decision Making

Evaluation in Individually Guided Education is a process that encompasses decisions relating to staff personnel, curriculum development, resource management, and home-school-community relations. However, the most frequent and critical use of evaluation processes is in the area of instructional decision making. Within the instructional process, evaluation occurs at three key points: at the beginning of a unit of instruction, during critical points of actual instruction, and at the conclusion of instruction.

Compatible Curricular Materials

Curricular materials in Individually Guided Education are used to meet a variety of individual differences among students. The materials should possess four attributes: (1) the materials should be reliable and accurate; (2) all materials prepared for individual students should be learnable; (3) the materials and associated activities should be teachable; and (4) the materials should be accessible to the staff and useable in an instructional setting.

Facilitative Environments

Facilitative environments are supports to the system of Individually Guided Education established through the school's internal organization and its external environment. Within the school the primary facilitative environment is established through the multiunit organization. The state network provides an organized support system external to the school. The state network is a three-tiered arrangement of inter-relationships between Systemwide Program Committees, state education agencies, teacher education institutions, and regional IGE centers.

Support at the local level is provided in the first tier of the state network. It is established through the creation of a Systemwide Program Committee, a committee composed of representatives from each of the Individually Guided Education schools within the school system.

The Regional IGE Coordinating Council is the second tier in the state network support system. Regional IGE Coordinating Councils are established to represent geographical regions within a given state. They are composed of representatives from each of the Systemwide Program Committees, teacher education institutions, intermediate education agencies, and the state educational agency.

The third tier of the state network provides a statewide focus. It is composed of the state IGE coordinator, representatives from the Regional IGE Coordinating Councils, and key personnel from the state education agency.

A facilitative environment is also provided at the national level by the Association for Individually Guided Education. This is a voluntary open membership organization designed to promote the continued implementation and refinement of Individually Guided Education. In addition to the Association for Individually Guided Education four regional IGE centers provide services to schools and the state networks. Finally, the R & D Center provides a national focus through its continued efforts to provide a research and development base to the growth of Individually Guided Education and its related practices.

Continuing Research and Development

Research and development at the local school and collegiate levels contribute to the refinement of practices improving Individually Guided Education. One general area of research focuses upon the processes associated with learning and teaching. Also linked with this general area of research is the development of related curricular materials designed for Individually Guided Education. The second general area of research and development focuses upon the mechanisms that support the teaching and learning processes. Research and development activities associated with the multiunit school and home-school-community relations are examples of this area.

Home-School-Community Relations

Increasingly public understanding of Individually Guided Education serves to focus the overall effort of home-school-community relations. This is accomplished by developing home-school-community

relations programs that focus upon three general goals.

1. To make the IGE staff aware of and responsive to the educational expectations and available resources of the community, parents, and students.

2. To make the community, parents, and students more aware of and responsive to the requisites of the instructional program as implemented in IGE.

3 To identify and utilize ways and means of actively involving both staff and community in the awareness, commitment, changeover, refinement, and renewal phases of implementing IGE in the school.[15]

The achievement of these goals is characterized by interaction between various subpublics within the home-school community-environment. Each of these subpublics may possess different educational philosophies, values, and expectations which in turn serve to shape their perspective toward educational policies, programs, and practices.

The implementation of Individually Guided Education may require substantial changes in existing educational policies and practices. These changes may stimulate both supportive and nonsupportive behaviors within the subpublics of the home-school-community environment. To reduce nonsupportive behaviors resulting from the implementation of Individually Guided Education home-school-community relations is set within a political perspective. Within this context, Bowles and Fruth stated:

> . . . politics is not of the national, partisan variety, but of the type which determines the nature of the community in which people live, the sort of schools provided, and the kind of educational program conducted.[16]

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[15] Bowles and Fruth, "Improving Home-School-Community Relations."

[16] Bowles and Fruth, "Improving Home-School-Community Relations."

This perspective outlines an objective of home-school-community relations as the resolution of actual or potential conflict among various subpublics associated with the formulation of education policies and practices which determine the use of available resources, the value choices to be made regarding educational programs, and the locus of power in the educational system.

Research on Individually Guided Education

Concomitant with the research undertaken by the R & D Center, two additional research efforts have significantly influenced the refinement of Individually Guided Education. The first was an extensive case study initiated by the Center for the Advanced Study of Educational Administration at the University of Oregon.[17] Pellegrin conducted the study in 1967-68 and used the school as the unit of analysis, with specific emphasis upon the Instruction and Research Unit and Instructional Improvement Committee. Using three multiunit and four control schools the research sought to identify: (1) curricular and instructional specialization of staff; (2) working relationships between staff and principal; (3) decision-making patterns of the Instructional Improvement Committee and the Instruction and Research Unit; and (4) staff acceptance of multiunit school objectives. Major conclusions of the study are summarized below.

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[17] This research is summarized from Roland J. Pellegrin, SOME ORGANIZATIONAL CHARACTERISTICS OF MULTIUNIT SCHOOLS, Working Paper No. 22 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning. 1969) and Herbert J. Klausmeier, Mary J. Quilling, and Juanita S. Sorenson, THE DEVELOPMENT AND EVALUATION OF THE MULTIUNIT ELEMENTARY SCHOOL, 1966-1970, Technical Report No. 158 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1971).

With regard to task structure and specialization, Pellegrin reported that teachers in multiunit schools described their tasks as being associated with the achievement of specific instructional objectives more often than did teachers in the control schools. He also reported the existence of more coordination efforts among staff members in multiunit schools than in the control schools; the importance of planning was emphasized more in multiunit schools than in the control schools.

Three major types of curricular and instructional specialization were identified: (1) specialization by group size; (2) specialization by curricular expertise (teachers served as technical advisors to their colleagues); and (3) specialization by function (some teachers assumed primary assignments related to planning while others assumed leadership in materials development).

With respect to working relationships, sociometric charting procedures were used to identify interdependent and dependent relationships characteristic of the multiunit school. The unit leaders were the focal point of unit interaction and served as the connecting link between the staff and the principal. In addition, frequent nominations of aides by unit leaders and teachers, often considered as essential relationships, led Pellegrin to conclude that aides were important figures in the network of interdependent and dependent relationships with the unit structure.

Goal differences were noted between multiunit and control schools in terms of the goals each identified as being important to achieve. The multiunit schools identified "giving individual attention to students"

and "diagnosing learning problems of students" as first and second in importance. Control schools identified their first and second priorities as "insuring that students learn basic skills" and "developing student ability in analytical reasoning and problem-solving."

Substantial differences were noted between the multiunit schools and the control schools in the areas of job satisfaction and environmental climate. With respect to job satisfaction, seven out of ten questionnaire responses were reported to favor the multiunit schools. Although the three remaining categories of responses were not specified it was reported that they did slightly favor multiunit schools. Table 1 summarizes the results of that questionnaire.

Evidence gathered through a questionnaire showed that teachers in multiunit schools perceived their environment as being more free, less rigid, and more open to experimentation than did teachers in the control schools. It was also found that a greater percentage of teachers in multiunit schools believed that the following statements accurately described their schools: school policies encourage freedom in the selection of instructional materials (68 percent and 42 percent); school policies encourage freedom in student use of the library or other learning resources (64 percent and 35 percent); and school policies encourage freedom in experimenting with new teaching techniques (93 percent and 60 percent). Conversely, in response to the statement, "School policies encourage close adherence to official course outlines and/or curriculum guides," 32 percent of the teachers in the control schools regarded this

TABLE 1

PERCENTAGE OF RESPONDENTS IN MULTIUNIT AND NONMULTIUNIT SCHOOLS REPORTED AS "HIGHLY SATISFIED" ON SELECTED INDICATORS OF JOB SATISFACTION

Indicators of Job Satisfaction	Percentage of Respondents Reported As "Highly Satisfied"	
	Multiunit	Nonmultiunit
Satisfaction with progress toward one's personal goals in present position	26	15
Satisfaction with personal relationships with administrators and supervisors	61	39
Opportunity to accept responsibility for one's work or the work of others	61	43
Seeing positive results from one's efforts	36	15
Personal relationships with fellow teachers	73	55
Satisfaction with present job in light of one's career expectations	56	39
The availability of pertinent instructional materials and aids	60	27

as a highly accurate description of their school while only 6 percent in the multiunit schools indicated this as a highly accurate descriptor.[18]

The second study that influenced the refinement of Individually Guided Education was conducted concomitantly with the allocation of implementation funds in 1971 by the U.S. Office of Education. The Office of Program Planning and Evaluation (an agency of the U.S.O.E.) awarded a contract to Educational Testing Service, Princeton, New Jersey, to conduct an independent evaluation of the R & D Center's nationwide implementation effort. The evaluation's specific purposes were:

1. To conduct an independent process evaluation of the first-year installation of MUS-E and IGE patterns.
   a. Document and describe the training and installation activities carried out by the various national and state agencies.
   b. Describe the extent of implementation activity at the school level, based upon predetermined implementation criteria.
2. To derive feedback of general utility to a variety of persons involved in the overall installation process.[19]

Using a combination of on-site visits and questionnaires, data were gathered from over 200 schools implementing Individually Guided Education. Findings were presented to reflect the variety of implementation strategies and activites. The findings were generalized in

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[18] Pellegrin, ORGANIZATIONAL CHARACTERISTICS OF THE MULTIUNIT SCHOOL, p. 20.

[19] Roderick A. Ironside, THE 1971-72 NATIONWIDE INSTALLATION OF THE MULTIUNIT/IGE MODEL FOR ELEMENTARY SCHOOLS A PROCESS EVALUATION, VOLUMES I AND II (Princeton, New Jersey: Educational Testing Service, 1972).

in several ways. Ironside, the evaluator, stated:

> In spite of the different procedures and populations involved in acquiring data, there is a temptation to generalize to the whole installation operation. The conclusions below admittedly represent a distillation of the whole range of findings and interpretations, and in fact do constitute an act of generalization.
>
> So far as school-level operations are concerned . . . the emphasis in the conclusions is on those end-of year findings and site-visit findings. But no attempt is made to state that the findings and conclusions based on those data apply to the total group of 287 schools on the original rosters. However, the number of implementation variations, outcomes, and unique features among those schools leaves little doubt that the same (or larger) range of differences probably applies to the total group. In other words, we do not generalize particular findings, but we hypothesize a like array of differences and similarities among all schools.
>
> The same approach appears appropriate with respect to the operation of the several installation designs and models. Enough was learned from a variety of sources to justify certain general conclusions about their effectiveness, their potential, and their variable implementation.[20]

Findings are summarized in the areas of implementation and awareness, attitudes, and problems at the school level. It was reported that implementation occurred in a variety of local settings and was not restricted by building design, community typology, or size of student population. In addition to local setting, it was found that outcome measures for schools implementing in the fall did not vary significantly from those found in schools implementing in the spring. Based upon these and other findings, Ironside concluded that it was necessary to establish precise criteria in order to ascertain the implementation success of a

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[20]Ironside, NATIONWIDE INSTALLATION OF THE MULTIUNIT/IGE MODEL, VOLUME I, pp. 227-228.

particular school. In addition, two other considerations were reported as necessary in determining the measure of sucess: (1) the local milieu, needs, and circumstances of the school; and (2) the level of staff commitment and the general spirit and humanistic atmosphere.

With respect to implementation strategies it was reported that the R & D Center's nationwide installation effort was succesful in initiating and maintaining the implementation momentum. Local conditions and constraints made it necessary to modify the overall installation model. Additionally, it was found that the training program in the installation model was well conceived but that there were few controls to ensure equal or minimal training. It was also reported that minimal use of the R & D Center's implementation guidelines resulted from a lack of sequenced steps and general directions. Lastly, it was found that the Instructional Programing Model was the most difficult component to implement.

Findings were also reported with respect to awareness, attitudes, and problems at the local school level. It was reported that variations in the operational characteristics of Individually Guided Education resulted when individual schools responded to local needs, expectations, and personalities. In addition, teaming was found to be frequently cited as very rewarding, but, along with unit communications, it was cited as one of the two major teacher concerns. Finally, it was reported that there was a tendency for the units to become isolated entities within the school structure and that the importance of the instructional media center was often overlooked. From these findings Ironside concluded that

the implementation of specific characteristics of Individually Guided Education were not of and by themselves guarantees of successful implementation.

In the fall of 1972 a follow-up study was conducted by Educational Testing Service to gain additional insights into the implementation of Individually Guided Education and to correct for several limitations of the original study.[21] The follow-up study posed the following questions:

1. To what degree do the schools implementing Individually Guided Education satisfy the four fundamental implementation criteria set by the R & D Center: 1, active Instructional Improvement Committee; 2, multiage grouping of students; 3, application of the Instructional Programing Model in at least one curricular area; and 4, a multiunit design used throughout the entire school?

2. Were the patterns of IGE/MUS-E implementation carried from one year over to the second year?

3. Using a sample of schools implementing in the fall of 1971 and those implementing in the spring of 1972, to what extent did they continue to satisfy the more extended implementation criteria oultined in the detailed questionnaires administered in the original study?

Findings from this follow-up study showed that most schools met the four essential criteria set by the R & D Center. It was also found that a "drop-out" rate was virtually nil. Although decreased commitment was noted, all schools that had identified themselves as IGE/MUS-E in 1971-72 continued to do so at the time of the follow-up.

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[21]Roderick A. Ironside, A SUPPLEMENT TO THE 1971-1972 NATIONWIDE INSTALLATION OF THE MULTIUNIT/IGE MODEL FOR ELEMENTARY SCHOOLS. A PROCESS EVALUTION: THE FALL 1972 FOLLOW-UP (Princeton, New Jersey: Educational Testing Service, 1973).

There were many interpretations as to what constituted the initial steps of Individually Guided Education adoption, and great variations were discovered in the specific practices incorporated into the school's day-to-day operations. The need for technical assistance was a continued concern and usually centered on the resolution of local problems confronting individual schools.

An Extended Research Effort

With over 1,300 schools in twenty-three states currently employing Individually Guided Education practices there has been a steadily growing interest in related research. This research is presented in four areas: (1) the multiunit school, (2) instruction and achievement, (3) home-school-community relations, and (4) implementation.

The Multiunit School

Organizational Structure

The Axiomatic Theory of Organizations[22] was used by Gramenz, Walter, and Herrick to examine the organizational structure of the

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[22]The Axiomatic Theory of Organizations postulates a series of relationships between four organizational inputs and four organizational outputs. Inputs are complexity, centralization, formalization, and stratification. Outputs are adaptiveness, production, efficiency, and job satisfaction. Associated with the postulates are two ideal organizations, organic and mechanistic. The organic organization emphasized adaptiveness and the mechanistic organization emphasizes production. For a more complete discussion of the theory see Jerald Hage, "An Axiomatic Theory of Organizations," ADMINISTRATIVE SCIENCE QUARTERLY (October, 1965), pp. 289-320.

multiunit school. Herrick[23] reported that centralization and stratification were significant in differentiating the organizational structure of the multiunit school from the conventional elementary school organization, the multiunit school being less centralized and less stratified. Using an adaptation of Herrick's instrumentation, Walter[24] reported that the multiunit school was significantly less centralized than the conventional organization.

The results of Herrick and Walter indicate that the multiunit school is more like the organic organization than the mechanistic organization. This conclusion was evidenced by the findings of Walter when he reported that the multiunit school was more adaptive (the emphasis of the organic organization) than the conventional organizational structure of the elementary school.

Gramenz[25] used the Axiomatic Theory of Organizations in his examination of the multiunit school but added a role dimension. Although his

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[23]H. Scott Herrick, THE RELATIONSHIP OF ORGANIZATIONAL STRUCTURE TO TEACHER MOTIVATION IN MUTLIUNIT AND NON-MULTIUNIT ELEMENTARY SCHOOLS, Technical Report No. 322 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974).

[24]James E. Walter, THE RELATIONSHIP OF ORGANIZATIONAL STRUCTURE TO ORGANIZATIONAL ADAPTIVENESS IN ELEMENTARY SCHOOLS, Technical Report No. 276 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1973).

[25]Gary William Gramenz, RELATIONSHIP OF PRINCIPAL LEADER BEHAVIOR AND ORGANIZATIONAL STRUCTURE OF THE IGE/MUS-E TO I & R UNIT EFFECTIVENESS, Technical Report No. 320 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974).

general findings were supportive of those reported by Herrick and Walter, he found differences in perceptions of the structural characteristics by role categories. Higher levels of centralization and stratification were perceived by unit leaders and teachers than by principals. Lower levels of formalization were perceived by unit leaders and teachers than by principals. Gramenz concluded that principals saw the multiunit school as less centralized, less stratified, and more formalized than did teachers and unit leaders.

Grant[26] also reported that differing perceptions of the multiunit organization existed between principals and teachers. He used educational experience, inservice training, and the existence of an Instructional Improvement Committee as potential reasons for the differing perceptions. Inservice training was reported to be the significant variable that created differing perceptions of the multiunit organization. He concluded that teachers with ten or more hours of inservice were more productive, had a better conceptual understanding of the multiunit school, and gave more support to teachers having decision-making power in the multiunit school organization.

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[26]Merrill Alan Grant, "A Survey of the Perceptions of Teachers and Principals Toward the Multiunit School Organization" (unpublished Ed.D. dissertation, The University of Toledo, 1973).

Loose[27] examined decision structure, decision content, and decision style and reported that: (1) principals perceived more staff participation in decision making than did staff; (2) principals were identified as making about fifty percent of the decisions on a unilateral basis; (3) curricular decisions received less attention than management decisions; (4) the decision situation was instrumental in determining the decision-making style, with a unilateral style being more prevalent than a consensual or delegating one; and (5) the number of years of having an operational Instructional Improvement Committee did not mediate either content, style, or degree of involvement.

Loose's examination of decision structure, content, and style represented several selected characteristics of the decision process. An additional characteristic, the placement of decisions nearest to their point of implementation, is also descriptive of the multiunit school's decision process. Associated with this characteristic and the characteristics examined by Loose is the ability of staff members to influence decisions affecting their work environment. The ability to influence decisions affecting one's work environment is paralleled by Dutil's[28].

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[27]Caroline Alma Loose, "Decision-Making Roles and Patterns of the Instructional Improvement Committee (IIC) in Selected Eastern Wisconsin Multiunit Elementary Schools Organized Since 1967" (unpublished Ph.D. dissertation, University of Wisconsin-Milwaukee, 1973).

[28]Harvey Lewis Dutil, "Sense of Power and its Relation to Selected Teacher Characteristics and Selected Structural Characteristics of Elementary Schools" (unpublished Ph.D. dissertation, University of Connecticut, 1974).

conceptualization of a teacher's "sense of power." Using this conceptualization, he examined the relationships between a teacher's sense of power, organizational characteristics of schools, and personal behaviors of teachers. While he found that a sense of power was not related to participation in Individually Guided Education, he reported that his research did lend significant support to the relationship between a sense of power and the conceptual components of the multiunit school's organizational design.

The implications of Dutil's research is that the multiunit structure possesses the potential for increasing the control over one's work environment but that the potential is either not perceived or not used by teachers. Packard[29] provided support for this implication. He reported that principals in multiunit schools did not perceive a loss of decision-making prerogatives in spite of additional findings which showed that most decisions were made in a collaborative mode. The principal was apparently able to maintain decision-making prerogatives either through control or strong influence over the collaborative processes.

Packard reported one mediating variable in the authority relationships--unit leader selection procedures. In schools where the unit leader was selected by the principal, the decisions were often trivial in nature and the decision process dominated by the principal. The principal was also frequently consulted for advice and assistance. In schools where

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[29]John S. Packard, "Changing to a Multiunit School," THE PROCESS OF PLANNED CHANGE IN THE SCHOOL'S INSTRUCTIONAL ORGANIZATION, ed. W. W. Charters, et al. (Eugene, Oregon: Center for the Advanced Study of Educational Administration, 1973).

the unit leader emerged, the unit operated as a single entity; it operated in isolation from others, often without gaining clearance from the principal.

Packard's summary of the results of the reallocation of authority relationships is appropriate in view of the current empirical findings related to the multiunit school. He stated:

> For the most part, it was not evident that power had become centered in newly formed groups. Nor was there much evidence to suggest that different parties sought to accrue power or thought in terms of increased organizational control. Instead, the fairness and equity educators typically espouse was practiced, at least with regard to other adults, and permeated most considerations of resource distribution and school-wide priorities.[30]

Differentiated Staff Roles

Principal

The role of the principal focuses on administrative and educational leadership. Richardson[31] investigated role changes by comparing principals of multiunit schools with principals of conventionally organized schools. He reported that all principals placed a very high value and priority on educational leadership and that there were no differences in actual educational leadership behaviors.

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[30] Packard, "Changing to a Multiunit School," p. 112.

[31] Edward Ray Richardson, "A Study of the Changes in Role Perception and Role Behaviors of Principals in Individually Guided Education Multiunit Elementary Schools" (unpublished Ed.D. dissertation, Auburn University, 1972).

Specific differences were found in the area of self-perception of role performance. Principals in multiunit schools were found to perceive a significantly higher level of performance. Finally, principals and staffs of multiunit schools reported a significantly higher agreement of role expectations for the principal.

Unit Leader

The unit leader role represents the new position in the multiunit structure. Three general areas of responsiblity characterize the role: (1) as a teacher; (2) as a leader of an Instruction and Research Unit; and (3) as a member of the Instructional Improvement Committee. As a leader of the Instruction and Research Unit the unit leader must exercise skill in coordinating group efforts, building group cohesiveness, and maintaining group effectivenes. As an Instructional Improvement Committee member the unit leader must provide leadership in the planning of the school's instructional program. A fifty percent to seventy-five percent teaching responsibility is also an expectation of the unit leader role.[32]

Menzel[33] reported that there were no significant differences in leader behavior expectations for the unit leader when described by

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[32]Klausmeier, et al., INDIVIDUALLY GUIDED EDUCATION GUIDELINES, p. 39.

[33]Richard Clarence Menzel, "Leader Behavior of Unit Leaders in Selected Multiunit Elementary Schools" (unpublished Ed.D. dissertation, University of Northern Colorado, 1974).

principals, unit leaders, and teachers. Using the Leadership Behavior Description Questionnaire (LBDQ), he found that unit leaders exhibited significantly more consideration behaviors than initiating behaviors. Halpin described these two leadership dimensions as follows:

> Initiating structure is directed principally at the achievement of the formal goals of the group, i.e., success on missions, whereas consideration behavior is related essentially to the maintenance or strengthening of the group itself.[34]

Menzel also found no significant correlations between educational and professional experience and leader behavior. A strong, but not significant, correlation was reported between the size of the unit and leader behavior; the larger the unit the lower the initiating structure of unit leaders.

Sheridan[35] reported that principals, unit leaders, and teachers held conflicting expectations for the unit leader. Specifically, when the unit leader tasks were related to instructional coordination there was a significant difference between the expectations identified by principals and those identified by unit leaders. When the tasks were related to instructional coordination and interorganizational relationships there was a significant difference between the expectations of the principals and those of unit teachers.

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[34]Andrew Halpin, "Chapter II," in LEADER BEHAVIOR: ITS DESCRIPTION AND MEASUREMENT, ed. by Ralph M. Stogdill and Alvin E. Coons (Columbus, Ohio: Ohio State University), p. 53.

[35]Terrance John Sheridan, PERCEIVED ROLE AND EFFECTIVENESS OF THE UNIT LEADER IN CONDUCTING UNIT FUNCTIONS, Technical Report No. 318 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974).

The apparent differences between the findings reported in the Sheridan and Menzel studies center upon the measures used to determine role expectations. The LBDQ used in the Menzel study is an instrument that describes general leader behaviors. The questionnaire in the Sheridan study describes specific tasks associated with the performance of the unit leader role.

The Menzel and Sheridan studies indicate that principals, unit leaders, and teachers hold similar role expectations for the unit leader but have differing perceptions as to the specific tasks associated with the actual operationalization of that behavior. Thus, the unit leader is described as an individual who must be capable of directing the unit's effort toward the effective and efficient attainment of goals while maintaining a strong, cohesive team.

In describing the relationship between leader behavior and Instruction and Research Unit effectiveness, Evers[36] reported that instrumental leadership significantly contributed to total Instruction and Research Unit effectiveness. Further analysis showed that both instrumental and supportive leadership contributed significantly to instructional program effectiveness. Instrumental and supportive leader behaviors used in this study were similar to the leader behaviors described as initiating

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[36]Nancy A. Evers, AN ANALYSIS OF THE RELATIONSHIP BETWEEN THE EFFECTIVENESS OF THE MULTIUNIT ELEMENTARY SCHOOL'S INSTRUCTION AND RESEARCH UNIT AND INTERPERSONAL BEHAVIORS, Technical Report No. 298 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974).

structure and consideration behavior in the Menzel study.

Complementary findings were also reported by Singe[37] when he examined the relationship between effectiveness and leader behavior. He reported that task effectiveness and interaction effectiveness were found to be significantly correlated with unit leaders who exhibited both initiating structure and consideration behaviors. The relationships were reported as significant at both the Instructional Improvement Committee and the Instruction and Research Unit levels of organization.

Procedures of selecting unit leaders were also part of the research efforts. Murray[38] examined the unit leader selection process in two schools as they became multiunit schools. He reported that successful units were those in which the unit leader had been either chosen from outside the staff or selected from within using objective criteria. Unsuccessful units were ones in which the unit leaders had been chosen from within the staff by a "popularity contest" process, were prior friends of the principal and carried debts to him, or were unable to "be their own person" within the unit.

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[37]Anthony Louis Singe, "A Study of the Relationship Between Work Group Performance and Leader Motivation, Leader Behavior, and Situational Favorableness: An Application of the Contingency Theory of Leadership Effectiveness to Group Supervision in Multiunit Elementary Schools" (unpublished Ph.D. dissertation, University of Connecticut, 1974).

[38]Donald George Murray, "Organization Development Training for Adopting Multiunit Structure: A Comparative Case Study of Two Elementary Schools" (unpublished Ph.D. dissertation, University of Oregon, 1973).

Packard[39] reported that the selection procedures affected the conduct of the unit meeting and the faculty council (Instructional Improvement Committee). Where unit leaders were appointed he reported that:

> . . . faculty council meetings were held on a regular basis, dealt with foregone and trivial issues, avoided or neglected troublesome topics, and were dominated by the principal who set the agenda and ran the show. . . . teams with appointed leaders spent much time reviewing faculty council minutes and operated by the council's agenda.[40]

In contrast, in one school where the unit leaders emerged during the year of implementation, it was reported that:

> . . . units were relatively self-reliant, conducted their internal affairs without assistance . . . carried out their external affairs without gaining clearance from the principal. The school abandoned the regular schedule of council meetings and replaced it with a deliberate system which handled "critical" issues raised by any staff member.[41]

Unit Teacher

A work environment different from the conventional classroom characterizes the teacher role in the multiunit school. The teacher spends more time planning, teaching, and evaluating the instructional program as a member of a team. The teacher is also more likely to work with a greater variety of group sizes in meeting student needs.

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[39] Packard, "Changing to a Multiunit School."

[40] Packard, "Changing to a Multiunit School," p. 110.

[41] Packard, "Changing to a Multiunit School," p. 110.

Olszewski[42] focused his research on teaching behaviors of multiunit school teachers. Using Flander's Matrix[43] as a method of recording and describing teaching behaviors, he reported that there were no significant differences in the overall range of teaching behaviors exhibited by teachers in multiunit and conventional schools. However, a difference was reported in a specific class of teaching behaviors; multiunit school teachers exhibited a significantly greater number of shared teaching behaviors.

Aides

The teacher aide is an integral member of the multiunit school's differentiated staffing pattern. The role is characterized by instructional and clerical functions. White[44] indirectly described the aides' role when he explored their impact upon teaching behaviors. Four categories of teaching behaviors were identified: (1) instruction; (2) evaluation; (3) professional; and (4) management. A miscellaneous category was also used for activities not related to the other four. Each of the four major categories were broken into two dimensions: pre-active, activities preceding actual instruction; and inter-active, activities in

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[42]Rev. Donald William Oszewski, "The Effect of a Multiunit/Open Space School Structure on Teacher Behavior," (unpublished Ph.D. dissertation, University of Notre Dame, 1973).

[43]N. A. Flanders, ANALYZING TEACHER BEHAVIOR (Reading, Mass.: Addison-Wesley, 1970).

[44]Steven Joel White, "The Impact of Paid Instructional Aides on the Time Allocations for Teaching Activities in the Multiunit Elementary School" (unpublished Ph.D. dissertation, University of Wisconsin-Madison; 1974).

the actual instructional process. Table 2 presents the time spent by aides and teachers in each of the five categories.

The data presented in Table 2 identifies two areas in which the aides spent approximately 75 percent of their time: instruction, 24 percent; and management, 50 percent.

In determining the impact of aides upon teaching behavior, White noted that the use of aides enabled teachers to spend approximately 4 percent more time in direct instruction with children. Additionally, it was noted that teachers without aides spent approximately twice as much time in pre-active management activities as teachers with aides.

Totaling the amount of time spent at school and at home on school-related activities, White reported that teachers without aides spent on the average four hours per week more than teachers with aides.

White concluded that:

> [This] is a strong indication that teachers in IGE/MUS-E schools who work without an aide must devote more time to the job, since one can conclude that differences in length of work day required by individual school districts can not be responsible for such a large difference in time worked per week.[45]

The literature on the multiunit school presents both consistent and inconsistent findings. Descriptions of the multiunit school's organizational and role structure are reported in consistent terms when the perceptions of all staff members were used to create the data base. Inconsistencies are reported when perceptions of the multiunit school's

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[45] White, "The Impact of Paid Instructional Aides," p. 169.

TABLE 2

PERCENT OF TIME SPENT

BY TEACHERS AND AIDES IN IGE SCHOOLS

ON INSTRUCTIONALLY RELATED ACTIVITIES

Category	Aides	IGE Teachers With Aides	IGE Teachers Without Aides
Instruction/Pre-Active	3.69%	16.46%	15.79%
Instruction/Interactive	20.05	28.81	24.74
Evaluation/Pre-Active	10.25	7.08	8.31
Evaluation/Interactive	1.73	12.00	10.00
Professional/Pre-Active	.68	3.71	4.59
Professional/Interactive	2.28	5.94	6.77
Management/Pre-Active	27.06	3.62	7.35
Management/Interactive	23 04	13.83	15.49
Miscellaneous	11.21	9.51	7.19

Source: White, "The Impact of Paid Instructional Aides," pp. 137-138.

organizational and role structures are examined by individual role categories.

Instruction and Achievement

School Climate

Research has focused upon organizational climate, the establishment of an environment that teachers identify as being conducive to instruction; and upon learning climate, the environemnt that facilitates student learning. The staff and the student have provided the basic units of analysis.

In general, research has shown the organizational climate in multiunit schools to be significantly different from the organizational climate of nonmultiunit schools. Multiunit schools are more oriented toward change[46] and achievement[47]; they possess staffs that are instructionally

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[46] Don Moe Essig, "The Effects of a Multi-unit, Differentiated Staffing Organization Upon Teachers' Attitudes and Instructional Programs" (unpublished Ph.D. dissertation, University of Oregon, 1971).

[47] George Robert Bowers, "The Organizational Climate in Selected Ohio Multiunit and Traditional Elementary Schools" (unpublished Ed.D. dissertation, The University of Akron, 1973).

more satisfied[48], more motivated[49], and perceive greater levels of productivity[50]; and they employ more educationally progressive practices.[51]

An extensive nationwide study of organizational climate was undertaken by Kelly, Wood, and Joekel.[52] Using data gathered with the Organizational Climate Index from a sample of 545 Individually Guided Education schools, several major conclusions were formulated:

1. As the degree of implementation of the IGE model increases, teacher perceptions of a climate which is more "open" and and more productive of intellectual activities also increase.

2. The greatest changes in teacher perceptions of school climate occur as the degree of implementation increases, particularly in rural and inner city schools.[53]

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[48]Jimmie Wayne Mantzke, "An Analysis of the Effectiveness and Satisfaction of Teachers, Principals, and Superintendents Who Function Within Undifferentiated and Differentiated (IGE/MUS-E) Staffing Structures in the State of Wisconsin" (unpublished Ph.D. dissertation, University of Wisconsin-Madison, 1973).

[49]Herrick, "The Relationship of Organizational Structure to Teacher Motivation."

[50]Leslie Charles Bernal, "The Introduction of the Individually Guided Education/Multiunit Elementary School Model in Selected Elementary Schools and the Effects on Organizational Output" (unpublished Ed.D. dissertation, Boston University School of Education, 1973).

[51]Bernal, "The Introduction of IGE and Its Effects on Organizational Output."

[52]Edgar A. Kelley, Fred H. Wood, and Ronald Joekel, "Teacher Perceptions of School Climate and the Implementation of Individually Guided Education (IGE)," 1973, ERIC ED 083229.

[53]Kelley, Wood, and Joekel, "School Climate and the Implementation of IGE," p. 54.

Differences in learning climate have also been reported. Nelson[54] concluded that Individually Guided Education produced a more favorable learning climate for pupils when they scored significantly higher on measures of attitude toward (1) self-concept as learners, (2) instructional school morale, (3) school plant, and (4) community.

Edwards[55] reported that student attitudes toward school and peers were significantly higher in Individually Guided Education programs. He also reported that student attitudes toward learning and self-concept favored students in Individually Guided Education programs, but not significantly.

Organizational and Instructional Effectiveness

Research related to effectiveness centered upon organizational and instructional processes. Organizational effectiveness examined tasks associated with the multiunit school while instructional effectiveness examined the ability of staffs to individualize and improve instruction for children.

A series of research efforts were directed at the organizational effectiveness of the Instructional Improvement Committee, the Instruction

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[54] Richard Gardner Nelson, "An Analysis of the Relationship of the Multiunit School Organizational Structure and Individually Guided Education to the Learning Climate of Pupils" (unpublished Ph.D. dissertation, University of Wisconsin-Madison, 1972).

[55] Floyd Henry Edwards, "A Study of Affective Change in Elementary Schools Implementing Individually Guided Education" (unpublished Ed.D. dissertation, University of North Carolina at Chapel Hill, 1972).

and Research Unit, the principal, and the unit leader.

Smith[56] reported that the more an Instructional Improvement Committee chairman (usually the principal) was perceived to exhibit a primary concern for the comfort, well-being, status, and contribution of the committee members, the more effective the Instructional Improvement Committee. Effectiveness was found not to be related to either the committee members' attendance at an R & D Center workshop for multiunit school principals and unit leaders or the administrative experience of the principal.

Evers[57] reported that when considering unit member compatibility, leader behaviors, and level of task structure, only leader behaviors significantly influenced Instruction and Research Unit Effectiveness. Ancillary findings illustrated the importance of proper training. Evers reported that overall unit effectiveness was significantly increased when participation of unit members in workshops was being considered and when there was staff participation in training activities outlined in the R & D Center's implementation strategy.

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[56] Kenneth Blaine Smith, AN ANALYSIS OF THE RELATIONSHIP BETWEEN EFFECTIVENESS OF THE MULTIUNIT ELEMENTARY SCHOOL'S INSTRUCTIONAL IMPROVEMENT COMMITTEE AND INTERPERSONAL AND LEADER BEHAVIORS, Technical Report No. 230 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1972).

[57] Evers, RELATIONSHIP BETWEEN I & R UNIT EFFECTIVENESS AND INTERPERSONAL BEHAVIORS.

Complementary findings were reported by Singe[58] when he examined the relationship between effectiveness and leader behavior of principals and unit leaders. Summarizing the significant findings in the research, he concluded that different types of leader behavior of principals and unit leaders influenced the effectiveness of the Instructional Improvement Committee and the Instruction and Research Unit.

He reported that task effectiveness was significantly related to unit leaders who exhibited initiating structure and consideration behaviors and with principals who exhibited consideration behavior. Interaction effectiveness was significantly related to unit leaders and principals exhibiting both initiating structure and consideration behaviors. Task effectiveness was significantly related to interaction effectiveness.

The research on instruction and instructional effectiveness focused upon the establishment of conditions conducive to learning and their effects upon achievement. Essig[59] reported that there was an increase in the number of opportunities for students to be involved in determining their own program; an increase in the involvement of ancillary personnel in the instructional process, counselors, principals, and paraprofessionals; more collaboration between units; and a reduction in lock-step grouping.

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[58]Singe, "Relationship Between Work Group Performance, Leader Motivation, Leader Behavior, and Situational Favorableness."

[59]Essig, "Effects of MUS-E Organization Upon Teachers' Attitudes and Instructional Programs."

Joyal[60] examined changes in student learning patterns as schools implemented the multiunit school organization. His findings, significant at the .05 level, showed that learning patterns in multiunit schools were characterized by: (1) increased use of different instructional and audio-visual materials; (2) instructional groups of varying sizes; and (3) students showing greater self-direction in terms of learning activities.

Wright[61] developed an instrument to measure the degree of individualization contained within an instructional program. Based upon the literature, he formulated five general principles of individualization: Principle I--Learning Rate; Principle II--Learning Style; Principle III--Student Participation in Goal Setting; Principle IV--Student Participation in Determining Learning Sequence; and Principle V--Student Grouping Based on Student Characteristics, Desires, and Needs.

Using evaluative criteria for each of the five principles, findings showed that Principle I, Learning Rate, was the principle most often applied in Individually Guided Education programs, and that Principle III, Student Participation in Goal Setting, was the least often applied. Principles I-IV were found to form a core set of principles which were

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[60]Lloyd Harold Joyal, Jr., "A Comparison of the Types of Learning Patterns on Students in a Self-contained and Multiunit Elementary School" (unpublished Ph.D. dissertation, University of Wisconsin-Madison, 1973).

[61]Clarence Daniel Wright, "Formative Analysis of Selected IGE Schools in Alabama to Determine the Extent to Which These Schools are Individualized" (unpublished Ed.D. dissertation, Auburn University, 1972).

highly interdependent. The application of one principle in the core set affected the remaining three. Considering Principles I-IV as a core, Wright reported they were all attenuated by Principle V, Student Grouping Based on Student Characteristics, Desires, and Needs.

Strand[62] reported the results of an investigation into the effects of building configuration on Individually Guided Education programs. Findings showed that building configuration and sonic qualities restricted a variety of grouping patterns, particularly the independent and small group. Balancing the potential consequences of these findings, he reported that space utilization within a building increased to accommodate a variety of grouping patterns irrespective of whether or not a space was originally designed for instruction. The most important finding of the study was that the characteristic design of the space within a building was more critical in determining the accommodation of various group sizes than was the overall building design, be it conventional or open space.

Gains in student achievement also provided an area of examination for researchers. Lober[63] investigated the applicability of the Instructional Programing Model to instructional programs for children with

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[62]Gavin Milton Strand, "Relationship of School Plant Characteristics to Components of Individually Guided Education Programs in Wisconsin" (unpublished Ph.D. dissertation, University of Wisconsin-Madison, 1974).

[63]Irene Moss Lober, "Individually Guided Education--Resource Model" (unpublished Ed.D. dissertation, Virginia Polytechnic Institute and State University, 1974).

learning difficulties. Pretests were used to identify students with learning difficulties and to establish baseline achievement data. In the area of readiness, posttest scores indicated that children with learning difficulties were not different from children without learning difficulties. In reading, the growth analysis revealed that there were no significant differences in reading growth between the experimental and control groups. Growth analysis in the area of mathematics also showed no significant differences between the posttest means of the experimental and control groups. Lober also reported that 50 percent of the students with learning difficulties mastered 100 percent of the reading skills in the Work Attack area of the Wisconsin Design for Reading Skill Development that were appropriate for their grade level.

Several school districts reported student achievement gains in their district's Individually Guided Education programs. Kennedy et al.,[64] reported that student achievement was significantly higher in his districts' Individually Guided Education programs. Using the Iowa Test of Basic Skills, scores were gathered in 1972 and compared with district scores obtained in 1966, prior to the implementation of Individually Guided Education.

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[64]Frank M. Kennedy, et al., "The Multiunit Elementary School and Individualization," A Report to the Board of Education, Cedarburg, Wisconsin, 1972.

Hackett and McKilligin[65] reported the results of a three-year study of their district's Individually Guided Education programs. Using two multiunit schools and two control schools that mirrored the socio-economic profile of the multiunit schools, student achievement gains were investigated. Data were collected at the second- and sixth-grade levels in all curricular areas. Results showed that students in the multiunit schools had higher standardized scores, as measured by the Metropolitan Achievement Test, in all areas except sixth-grade spelling.

Home-School-Community Relations

Research is currently being conducted at the R & D Center to develop and validate a model of home-school-community relations. The model uses a political perspective in defining and developing related materials and programs. Research is currently focusing on several key components of the model. First, primary and secondary interaction patterns along with associated home-school-community relations activities will be identified to describe the ebb and flow of communications within the home-school-community environment.[66] Sources of conflict and its resolution in the home-school-community environment during the

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[65] Jack Hackett and George McKilligin, "A Study of the Multiunit-IGE Elementary Schools," A Report prepared at the request of the Board of Education, Janesville, Wisconsin, August, 1972.

[66] Walter E. Krupa, "Development of an Instrument to Assess Home-School-Community Relations in Individually Guided Education (dissertation in progress, University of Wisconsin-Madison).

implementation of Individually Guided Education are also being researched.[67] Patterns of citizen participation in education are also being investigated.[68] The present study, the identification of common reference points characteristic of Individually Guided Education, is part of that research effort.

Diener[69], in a dissertation which originated outside of the R & D Center's research effort, identified and evaluated the home-school communications programs in ten selected schools. Findings showed three general types of activities: (1) one-way communications, (2) participatory activities, and (3) advisory activities. Seven criterion factors--qualitative measures--were also identified.

In the analysis of the ten programs, findings indicated that all schools had similar programs but that the majority lacked both long- and short-range programs involving home, school, and students. A significant outcome of this study is the identification of over fifty home-school communications activities.

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[67]William R. Miles, "Home-School-Community Relations as a Political Process" (dissertation in progress, University of Wisconsin-Madison).

[68]Thornton A. Liechty, "Citizen Participation in Educational Systems" (dissertation in progress, University of Wisconsin-Madison).

[69]Jacquelyn M. Diener, "Identification and Evaluation of the Home-School Communications Program in Thirteen Individually Guided Education Schools in Alabama" (unpublished Ed.D. dissertation, Auburn University, 1972).

Implementation of Individually Guided Education

The implementation of Individually Guided Education is currently being promoted by two organizations using different implementation strategies, the R & D Center and I/D/E/A of the Kettering Foundation. Although the research is being conducted to reflect these two differing strategies, it is extremely difficult to ascertain the intricacies and impact of either strategy because most schools have been exposed to all or at least parts of both strategies

A third strand of implementation literature resulted from limited implementation efforts by the Center for the Advanced Study of Educational Administration. While it was not their primary purpose to implement Individually Guided Education, they did use it to examine the feasibility of "organizational development training" as a reasonable implementation mechanism. Within the limits of feasibility the literature on implementation is categorized and reported according to the preceding three strategies.

R & D Center Implementation

The R & D Center's implementation strategy utilized a five-phase process: (1) awareness, (2) commitment, (3) changeover, (4) refinement, and (5) renewal.[70] The implementation was initiated by the R & D Center through the establishment of a support system. The support system had four components: (1) a state IGE network, on organizational arrangement

[70] Wisconsin Research and Development Center for Cognitive Learning, FINAL REPORT: THE IMPLEMENTATION OF IGE: 1973-1974.

encompassing the state education agency, teacher education institutions, and local school districts; (2) the Association for Individually Guided Education, a nationwide voluntary association with open membership; (3) leadership development activities sponsored by the R & D Center, the UW/SRF Project; and (4) regional IGE centers, centers located at teacher education institutions that are responsive to the needs of schools implementing Individually Guided Education.

Research efforts have been directed at the diffusion and the institutionalization of Individually Guided Education. Paul[71] reported that the degree of diffusion is positively related to various linkages with teacher education institutions. This was evidenced by the identification of the teacher education institution-user system linkage as the most frequent source of interaction. The type of interaction was also associated with the different linkages. Two-way collaborative interaction was characteristic of four linkages: (1) teacher education institution-user system; (2) state education agency-teacher education institution; (3) R & D Center-teacher education institution; and (4) R & D Center-state education agency. In contrast, one-way communication was reported to describe the linkage between the user system and the state education agency and the R & D Center.

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[71] Douglas A. Paul, THE DIFFUSION OF AN INNOVATION THROUGH INTER-ORGANIZATIONAL LINKAGES: A COMPARATIVE CASE STUDY, Technical Report No. 308 (Parts 1 and 2) (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974).

Paul also reported that the lack of consistent definitions of the unit leader role and the building configurations of implementing schools served to impede the diffusion of Individually Guided Education.

Howes[72] reported that there were six factors affecting institutionalization: (1) open and supportive environments; (2) user liking for MUS-E; (3) user cost-benefit; (4) use of open communication channels; (5) supportive services and resources; and (6) the flexibility of the change process. Specific variables of change which related directly to the institutionalization of the multiunit school were: (1) the perceived relative advantage, observability and simplicity of MUS-E; (2) the degree to which the individual was informed, involved, and supported the change process; (3) the way and degree to which the individual communicated with others; and (4) the way and degree to which the school organization was complex and less formalized.

Building upon the previous research of Charters and Pellegrin[73], researchers from the Center for the Advanced Study of Educational Administration conducted intensive case studies in four Wisconsin multiunit schools to identify problems encountered during implementation and how

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[72]Nancy J. Howes, CHANGE FACTORS RELATED TO THE INSTITUTIONALIZATION OF THE MULTI-UNIT ELEMENTARY SCHOOL, Technical Report No. 319 (Parts 1 and 2) (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1974).

[73]W. W. Charters, Jr. and Roland J. Pellegrin, "Barriers to the Innovation Process: Four Case Studies of Differentiated Staffing," EDUCATIONAL ADMINISTRATION QUARTERLY, Vol. 9 (Winter, 1973).

they were solved.[74] Of the nine categories of identified problems faced by the four schools, the categories of standardization and incorporation accounted for two of the major problems: increased work demands and task environment criticism.

Standardization was the identification of forces and the response to forces which result in all units in a school adopting the same procedural characteristics. That condition created internal situations where some units were either held back or pushed forward before they were ready, in order to gain a school-wide procedural base.

Task environment criticism was also identified as a strong standardizing force. Describing the effects of this type of criticism, Packard stated:

> Criticism comes up from under every rock, out from around every corner, and down from almost every high place. For schools, it is like a prevailing wind; though it may fluctuate, it rarely stops. For schools in transition it can reach gale-like proportions.
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> Not only were criticisms expected, but some teachers feared the worst. Indeed, certain faculty members seemed to feel guilty about "changing the system" and reacted noticeably to the merest hint of public displeasure . . . schools and teachers adhere to safe, agreed-upon practices to avoid the charge of having made mistakes. In schools, as elsewhere, service to clients is equated with following the proper procedure. For schools in transition, agreement about what are safe procedures is shaken until or unless criticism is felt and acted upon. Standardization is at least an adaptation if not a solution to perhaps, the most severe problems these schools faced: fickle, unremitting, intense task environment criticisms.[75]

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[74] Packard, "Changing to a Multiunit School."

[75] Packard, "Changing to a Multiunit School," p. 118.

Incorporation was defined as the implementation stage at which the school decided it had achieved its goals and reduced its innovative efforts. It was reported that incorporation occurred approximately two years after initial implementation, often terminating efforts too soon. Reasons for incorporation related to staff exhaustion, loss of the luster of innovation, and the loss of the leader promoting the innovation.

Problem-solving mechanisms used by schools to cope with implementation problems could not be isolated. Packard reported that the use of special techniques, logic manipulation, or systematic treatment of problems during implementation were not found. He further reported that most problems continued to exist.

I/D/E/A Implementation Strategy

The implementation strategy employed by I/D/E/A utilized a contractual agreement with an intermediate agency. That agreement called for the intermediate agency to identify at least one full-time facilitator to work with approximately fifteen schools. Using a clinical approach, I/D/E/A trained the facilitator to utilize their implementation strategy and training materials. After facilitator training there was little direct support to the intermediate agency from I/D/E/A.

Literature related to this strategy focuses on the intervention training program, the facilitator's role, the source of initiation for implementing Individually Guided Education, and instrumentation to measure rate of implementation.

Wald[76] reported that there were no significant changes in general attitude or knowledge of Individually Guided Education as a result of participating in the intervention program.

Strunka[77] described the role of the facilitator in terms of task performance and leader behaviors. Organizational and operational functions were reported to characterize the task performance area of the facilitator role: carrying out pre-service, inservice, and service activities; promoting league interaction; and utilizing a variety of measures to ascertain the degree of implementation at the local and league levels. Findings also indicated that the facilitator was seen as displaying executive professional leadership behaviors along with managerial and social support behaviors.

Lacy[78] utilized a reputational approach to identify the source of Individually Guided Education initiation at the local school district level. In all but one of the seven school districts encompassed in the study, the point of initiation occurred at the central office level: the

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[76]Larry Anderson Wald, "An Analysis of the Effects of an Intervention Program on IGE Intermediate Agency Facilitators" (unpublished Ed.D. dissertation, Indiana University, 1972).

[77]Joseph Vincent Strunka, "The IGE Facilitator as Perceived by IGE Principals, Unit Leaders, and Facilitators" (unpublished Ph.D. dissertation, the University of Nebraska-Lincoln, 1974).

[78]Dennis Gale Lacy, "Methods of Introducing Individually Guided Education (IGE) Programs in Selected School Systems in Indiana (1972)" (unpublished Ed.D. dissertation, Indiana University, 1972).

contacts were four coordinators of elementary education and two assistant superintendents in charge of instruction. Although the source of initiation was at the central office level, it was found that the principal had spent the most time making presentations about Individually Guided Education. Findings reported the average time spent, by role categories: principals, 83 hours; assistant superintendents, 37 hours; superintendents, 33.5 hours; and unit leaders, 12 hours. Small-group and question/answer seminars were reported as the most frequent presentation format.

By contrast, Benka[79] reported that directors of instruction were not identified as integral participants in the implementation process. Directors of instruction were reported by principals and unit leaders as neither being involved nor contributing useful information. The dissimilarity of findings may be associated with the implementation strategies that were used in each of the two samples.

Halverson[80] used I/D/E/A's implementation outcomes as a base for developing an instrument to determine the degree to which a school had achieved the concepts embodied in Individually Guided Education. The instrument was developed to measure the concepts without using any of

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[79]John Thomas Benka, "The Director of Instruction as an Agent in Organizational Change" (unpublished Ph.D. dissertation, University of Wisconsin-Madison, 1972).

[80]James R. Halverson, "Development and Testing of an Instrument to Measure the Degree of Implementation of Individually Guided Education Processes" (unpublished Ph.D. dissertation, Drake University, 1974).

jargon associated with Individually Guided Education. That enabled the instrument to be administered to any type of school. Findings demonstrated the instrument's ability to discriminate Individually Guided Education schools from non-Individually Guided Education schools. It was also reported that mean scores on the instrument increased as the number of years the school had been implementing increased, indicating a continual growth in the degree of implementation. Perceptions of teachers were reported to be the best indicators of the degree of implementation.

Organizational Development Strategy

A series of research studies were undertaken by the Center for the Advanced Study of Educational Administration to examine the usefulness of organizational development techniques as vehicles to prepare a staff to implement the multiunit school. Murray[81] investigated two schools that went through the same organizational development training program but were at very different points of implementation two years later. School B had a fully adopted multiunit school while School A had reverted to a more conventional structure. It was reported that School A had implemented more of the multiunit concept the first year than School B had implemented, but that during the second year School A experienced a reversal to a more conventional structure. While School A's progress was very rapid the first year, School B's progress was slower but continual and ultimately surpassed School A's.

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[81]Murray, "OD Training for Adopting Multiunit Structure."

Based on his findings, Murray concluded that organizational development techniques applied to the implementation of Individually Guided Education must proceed in a sequential fashion aimed at increasing organizational effectiveness; he also concluded that the specific multiunit design used at the school site must evolve through problem-solving by staff rather than by being imposed by an external consultant.

Smith[82] investigated two schools, one accepting and one rejecting the multiunit school, after they went through a group development training program (group development is essentially the same as organizational development except that in group development a small cadre of personnel are being trained instead of the entire staff). Smith reported that differences were found in three areas: (1) entry--the adopting schools had existing norms that were compatible to norms associated with the multiunit school; (2) selection of the training group--the adopting school had a training group that represented the staff and was formed from volunteers; and (3) the training process--the adopting school's training group perceived itself as an interim committee whose purpose was to disseminate information and offer the staff a choice in whether or not to implement the multiunit school.

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[82]Mary Ann Rasmusen Smith, "A Comparison of Two Elementary Schools Involved in a Major Organizational Change: Or You Win a Few; You Lose a Few" (unpublished Ph.D. dissertation, University of Oregon, 1972).

Evers[83] reported the costs associated with the first year of implementation of Individually Guided Education. The sample of thirty-nine schools in eight states represented schools of varying size, location, and community typology. The schools also represented the implementation strategies employed by the R & D Center and I/D/E/A.

It was reported that the majority of schools found no increase or decrease in expenditures for (1) vandalism; (2) pupil absenteeism; (3) professional, paraprofessional, and custodial salaries; (3) consultative services; and (5) instruction materials and equipment, school plant, and furnishings. Neither an increase nor a decrease was reported in certified teachers, central office personnel, special teachers, substitute teachers, paid student teachers, and custodians.

The majority of schools reported increases in (1) the number of paid paraprofessionals, and (2) expenditures for inservice materials, workshops, and conferences.

Ancillary findings showed an increase in the efficient use of materials, and additional revenue was designated for implementation in approximately 50 percent of the schools.

Statement of the Problem

The purpose of this study was to examine the interpretation of the underlying characteristics of the multiunit school and the Instructional

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[83] Nancy A. Evers, IGE/MUS-E FIRST YEAR IMPLEMENTATION COST SURVEY, Technical Report No. 256 (Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning, 1973).

Programing Model as they applied to home-school-community relations. The review of the literature in this chapter presented a historical development of Individually Guided Education. Related literature was also presented.

While the literature presented strong evidence in support of the successful implementation efforts by the Wisconsin Research and Development Center for Cognitive Learning, it also pinpointed a limitation in their research and development process: the limitation is in the consideration of local needs, expectations, and circumstances. Throughout the development of Individually Guided Education the unit of analysis was typically confined within the school. Little effort was made to extend the development efforts into the school's environment, and the clientele it serves in particular.

The multiunit school was generally found to be a facilitative mechanism for practices associated with the other components of Individually Guided Education. However, many different interpretations of the multiunit school and its characteristics were peculiar to role positions.

Changes in authority relationships have occurred as a result of the formation of the Instructional Improvement Committee and the Instruction and Research Unit. The reallocation of many decision-making prerogatives from the principal to the Instructional Improvement Committee has not only created new decision-making roles but has created the potential for organized coalitions to compete for the school's limited resources, and to alter programs and procedures consistent with their own goals, needs, and desires

Therefore, the specific objectives of this research were:

(1) To describe the characteristics of the multiunit school and the Instructional Programing Model.

(2) To analyze the interrelationships between the characteristics identified in Objective 1 by identifying and describing each in terms of allocations of (1) scarce economic resources, (2) educational values, and (3) power.

Significance

This study was significant from three perspectives--that of the implementor of Individually Guided Education, that of the practitioner of Individually Guided Education, and that of the researcher. The significance for the implementor was the identification of common interpretations of Individually Guided Education. These common interpretations, or reference points, should serve to assist the implementor in the tasks related to the development of training strategies and materials and their subsequent use in the field. In addition, the identification of the patterns of resource, value, and power allocations will assist the implementor in his implementation efforts by enabling him to anticipate potential areas of conflict in the home-school-community environment.

For the practitioner, the study was of significant value in providing information upon which to build effective home-school-community relations programs. Common reference points should provide a means to improve communication of the concept of Individually Guided Education and its related practices to students, parents, and the general community. Identified patterns of resource, value, and power allocations will assist the local school in anticipating the effects of necessary changes when

implementing Individually Guided Education. This will enable practitioners to identify potential sources of conflict in the school's home-school-community environment.

For the researcher, the study contributed to the development of a model of home-school-community relations. The findings of this case study will provide a basis for hypothesis development and verification.

Organization of the Dissertation

Chapter Two presents the design and methodology used in the present study. Chapter Three is the data presentation of the two case studies. Chapter Four is the analysis of the case studies. Chapter Five is a summary of the study, its conclusions, and its implications for further educational research and practice.

CHAPTER II

DESIGN AND METHODOLOGY

Introduction

In the review of the literature in the preceding chapter, the development and implementation of Individually Guided Education was discussed. The review primarily covered the multiunit school, instructional programing, home-school-community relations, and implementation. While strong evidence was presented in support of the implementation efforts of the Wisconsin Research and Development Center for Cognitive learning, it was however cited that their research and development process had a limitation: there was a lack of consideration of local community needs, expectations, and circumstances. It was also found that the unit of analysis has typically been confined to the school building. Little effort was made to include the community served by the school. Additionally, there was only a minimal attempt to relate two major components of Individually Guided Education, the multiunit school and the Instructional Programing Model, within a framework which includes the community served by the school: a framework that encompasses the home, the school, and the community.

Home-school-community relations has been defined in this study as the resolution of both actual and potential conflict among various subpublics which may be associated with policy decisions or administrative practices determining (1) the use of available, scarce resources, (2) the value choices to be made regarding the educational program, and (3) the locus of power in the educational enterprise.

Using this perspective of home-school-community relations, this research had two major objectives:

1. To describe the characteristics of the multiunit school and the Instructional Programing Model.
2. To analyze the interrelationships between the characteristics identified in Objective One by identifying and describing each in terms of allocations of: (1) scarce economic resources, (2) educational values, and (3) power.

Design and Methodology

This research was exploratory in design. After identifying a conceptual framework and a set of exploratory questions to establish the overall parameters of the research, two school sites were selected which typified the major dimensions of this research. Data were gathered from relevant sources at each school site. Relevant documents were analyzed and observations recorded; however, interviews with nominated, positional, and randomly selected respondents were used as the primary source of data. Data from each interview and from other relevant sources were recorded according to the key dimensions of the study. Each of the steps in the design is explicated in greater detail in the remaining sections of this chapter.

Conceptual Framework

The conceptualization of home-school-community relations used in this research was provided by Bowles and Fruth.[1] With increasing public

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[1] B. Dean Bowles and Marvin J. Fruth, "Improving Home-School-Community Relations," in THE PRINCIPAL AND INDIVIDUALLY GUIDED EDUCATION, eds. James L. Lipham and Marvin J. Fruth (Reading, Mass.: Addison Wesley Publishing Company, 1976 (In Press)).

understanding of Individually Guided Education as the goal of home-school-community relations programs, Bowles and Fruth provide a conceptual model which is set within a political framework. They state that

> . . . an effective home-school-community relations program is good, practical politics. In this context, politics is not of the national, partisan variety, but of the type which determines the nature of the community in which people live, the sort of schools provided, and the kind of educational program conducted. Hence, all of the media, committee structures, community analysis techniques, modes of communication, and involvement activities are but means to accomplish the twin objectives of (1) the resolution of conflict, and (2) the allocation of resources, selection of values, and the distribution of power.

They outline several characteristics of "principles" supporting the concept of home-school-community relations.

1. The children comprise the most important subpublic in the concept of community and should be the focal point of any home-school-community relations program.

2. Home-school-community relations involve a close working relationship with parents.

3. Increased involvement of subpublics in the creation of educational policies and practices has created a society in which educators no longer have a monopoly on educational philosophies, policies, and practices.

4. The involvement of subpublics in home-school-community relations activities should not be limited to advisory committees.

5. Home-school-community relations should be characterized by ongoing, interactive, and meaningful relationships with the various subpublics rather than assuming the characteristics of "crisis management."

6. A home-school-community relations program is more than the effective use of media. Rather than being the objective a home-school-community relations program, the effective use of media

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[2]Bowles and Fruth, "Improving Home-School-Community Relations."

becomes a mechanism for interaction between the home, the school, and the community.

7. The school staff must take full advantage of the community's available educational resources.

8. The changes associated with Individually Guided Education must be translated into visible and tangible benefits that are easily understood by the school-community subpublics.

The principles underlying home-school-community relations are characterized by interaction between various subpublics within the home-school-community environment. Each of these subpublics may possess different educational philosophies, values, and expectations which in turn serve to shape their perspective toward educational policies, programs, and practices.

The implementation of Individually Guided Education may require substantial changes in existing educational policies and practices. These changes may stimulate both supportive and nonsupportive behaviors within the subpublics of the home-school-community environment. To reduce nonsupportive behaviors resulting from the implementation of Individually Guided Education, Bowles and Fruth have set their model of home-school-community relations in a political perspective. This perspective outlines an objective of home-school-community relations programs as the resolution of actual or potential conflict among the various subpublics associated with the formulation of educational policies and practices which determine the use of available resources, the value choices to be made regarding educational programs, and the locus of power in the educational system.

The concepts of resources, values, and power are integral components of this research. Easton[3] and Yuchtman and Seashore[4] provide the framework for the conceptualization of resources, describing them as "those economic means by which organizations achieve their goals." These means may be existent within the organization as well as in its external environment.

The conceptualization of values is drawn from Wenger,[5] Easton,[6] and Lasswell and Kaplan.[7] The concept of values as used in this research is "an object, event, and/or condition that is desired by individuals and/or groups within the particular system." The desire attached to the object, event, and/or condition has the potential to influence behavior.

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[3]David Easton, A FRAMEWORK FOR POLITICAL ANALYSIS (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1965).

[4]Ephraim Yuchtman and Stanley E. Seashore, "A System Resource Model Approach to Organizational Effectiveness," in READINGS IN ORGANIZATIONAL BEHAVIOR AND HUMAN PERFORMANCE: REVISED EDITION, eds. W. E. Scott, Jr. and L. L. Cummings (Homewood, Illinois: Richard D. Irwin, Inc., 1973), pp. 160-170.

[5]Robert Joseph Wenger, "A Study of the Relationship Between Institutional Conflict and a Working Consensus of Values" (unpublished Ed. D. dissertation, University of California, Los Angeles, 1972).

[6]Easton, A FRAMEWORK FOR POLITICAL ANALYSIS.

[7]Harold D. Lasswell and Abraham Kaplan, POWER AND SOCIETY: A FRAMEWORK FOR POLITICAL INQUIRY (New Haven, Conn.: Yale University Press, 1950).

The work of Lasswell and Kaplan,[8] Iannaccone,[9] and Agger[10] is used by this researcher to conceptualize the notion of power as "the potential ability of individuals and/or groups to affect decisional outcomes." The potential ability to affect decisional outcomes may be located in either the system's formal organizational structure or encased within its informal networks.

The principles behind the concept of home-school-community relations and a political perspective provide the backdrop for the model for home-school-community relations (Figure 3). The model has two major dimensions. First, there are four primary interaction patterns: district community-administration/Systemwide Program Committee; school community-principal/Instructional Improvement Committee; home-unit leader/Instruction and Research Unit; and child-teacher. Each individual and group has resources, power and values.

The four primary interaction patterns describe the basic interaction networks within the home-school-community environment. The outer ring on Figure 3, the district community-administration/Systemwide Program Committee, represents the sphere of interaction on a district level.

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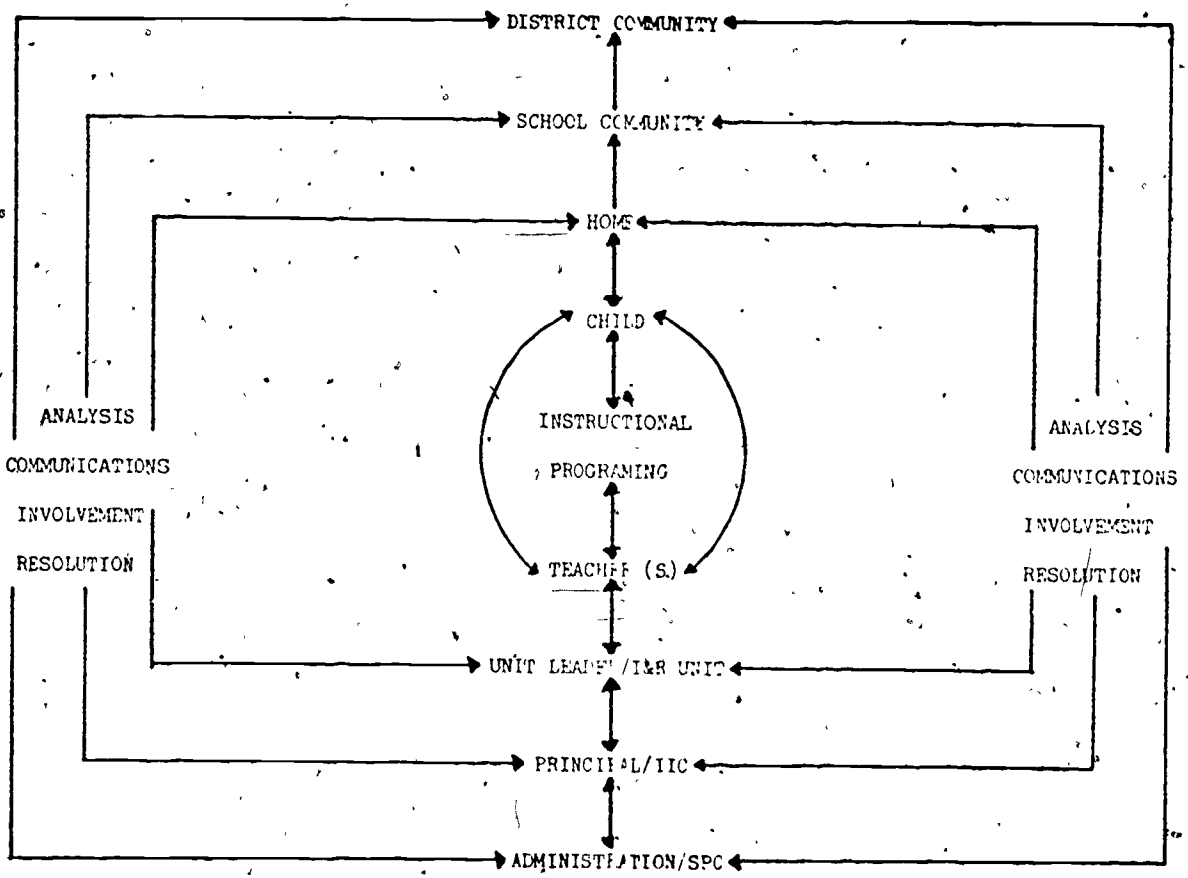
[8]Lasswell and Kaplan, POWER AND SOCIETY.

[9]Laurence Iannaccone, "An Approach to the Informal Organization of the School," in BEHAVIORAL SCIENCE AND EDUCATIONAL ADMINISTRATION, ed. Daniel E. Griffiths (Chicago: The National Society for the Study of Education, 1964).

[10]Robert E. Agger, Daniel Goldrich, and Bert E. Swanson, "A Political Decision-Making Model," in THE SEARCH FOR COMMUNITY POWER, eds. Willis D. Hawley and Frederick M. Wirt (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1968).

FIGURE 3

HOME-SCHOOL-COMMUNITY RELATIONS IN THE IGE SCHOOL



Source: Bowles and Fruth, "Improving Home-School-Community Relations."

Within this pattern interaction focuses upon the formulation of the district's overall educational program.

Moving inward, the next ring, the school community-principal/Instructional Improvement Committee pattern, represents the interaction between the school and the community it serves. It is assumed that the greater the harmony between the school community's educational values and expectations and the school's response to those values and expectations, the more likely the school community will be to use its power and resources to support the values encased within the school's instructional program.

The next ring, the home-unit leader/Instructional and Research Unit pattern, focuses upon one subpublic within the school-community--the parents. The interaction in this pattern is highlighted by two characteristics. First, educational expectations held by parents are often strongly influenced by the expectations they hold for their children. This serves to limit parental viewpoints concerning the total educational program. Second, since parents are the primary receivers of the school's services, they are extremely influential in determining educational policies and practices. With the possibility of substantial changes in existing policies and practices during the implementation of Individually Guided Education, it is critical that the interaction in this pattern supplies the parents with a clear, concise interpretation of Individually Guided Education.

The inner ring, the child-teacher pattern, represents interaction created as a result of educational experiences developed through the instructional programing process. It is at this level that educational

values implicit within Individually Guided Education are translated into visible and tangible policies and practices. Since children are direct participants in Individually Guided Education, they carry to the community firsthand experiences and interpretations of the school's instructional program. Children, therefore, are a vital link with the school community, and particularly the home, which can be utilized to gain support for the implementation of Individually Guided Education.

The four concepts and competencies encompassed by the model--analysis, communication, involvement, and resolution--are designed to facilitate the resolution of actual and potential conflict associated with the allocation of available resources, educational values, and power. Analysis covers three functional areas: (1) the accurate identification of issues and their elements; (2) the identification of individuals and groups that are or could become active on a particular issue; and (3) the identification and matching of specific individuals and groups with specific issues.

Communication is the vehicle through which information is exchanged among and between various subpublics. Access to and interpretation of information is critical in communicating Individually Guided Education policies and practices in and among the various subpublics. In order that accurate information be transmitted, the sender should consider the direction of the communication, one-way or two-way; its style, positive or negative; the proper vehicle, face-to-face, telephone conversation, or mass media techniques; the conditions through which the communication proceeds, public or private, time, and location; and the quality of the message itself, clear, concise, and accurate.

Involvement is the inclusion of different subpublics in various activities associated with the analysis, communication, and resolution of actual and potential conflict. Implicit in the concept of involvement is the assumption that active participation by parents and other subpublics will directly benefit children. Hence, more involvement will result in more benefits for children, which will develop greater support for the school's instructional program, Individually Guided Education.

Resolution is the process of resolving issues related to the actual or potential conflict generated by the allocation of available resources, the selection of educational values, and the distribution of power within the educational system. While analysis, communication, and involvement are means to facilitate the resolution of conflict, there are four distinct modes of conflict resolution in home-school-community relations: (1) rational decision making, (2) persuasion, (3) bargaining, and (4) power play. The differences between the four modes center upon the relationship of the goals of each party in the conflict, the parties' willingness to modify those goals, and the stakes which each party stands to gain or lose as a result of the resolution of the conflict. Figure 4 illustrates the relationship between the four modes of conflict resolution in home-school-community relations.

The model for home-school-community relations assumes that if there is agreement between the home, the school, and the community regarding the allocation of scarce available resources, the selection of educational values, and the distribution of power, then student learning will be increased. Figure 5 illustrates the interrelationships between the concepts

FIGURE 4

FOUR MODES OF CONFLICT RESOLUTION

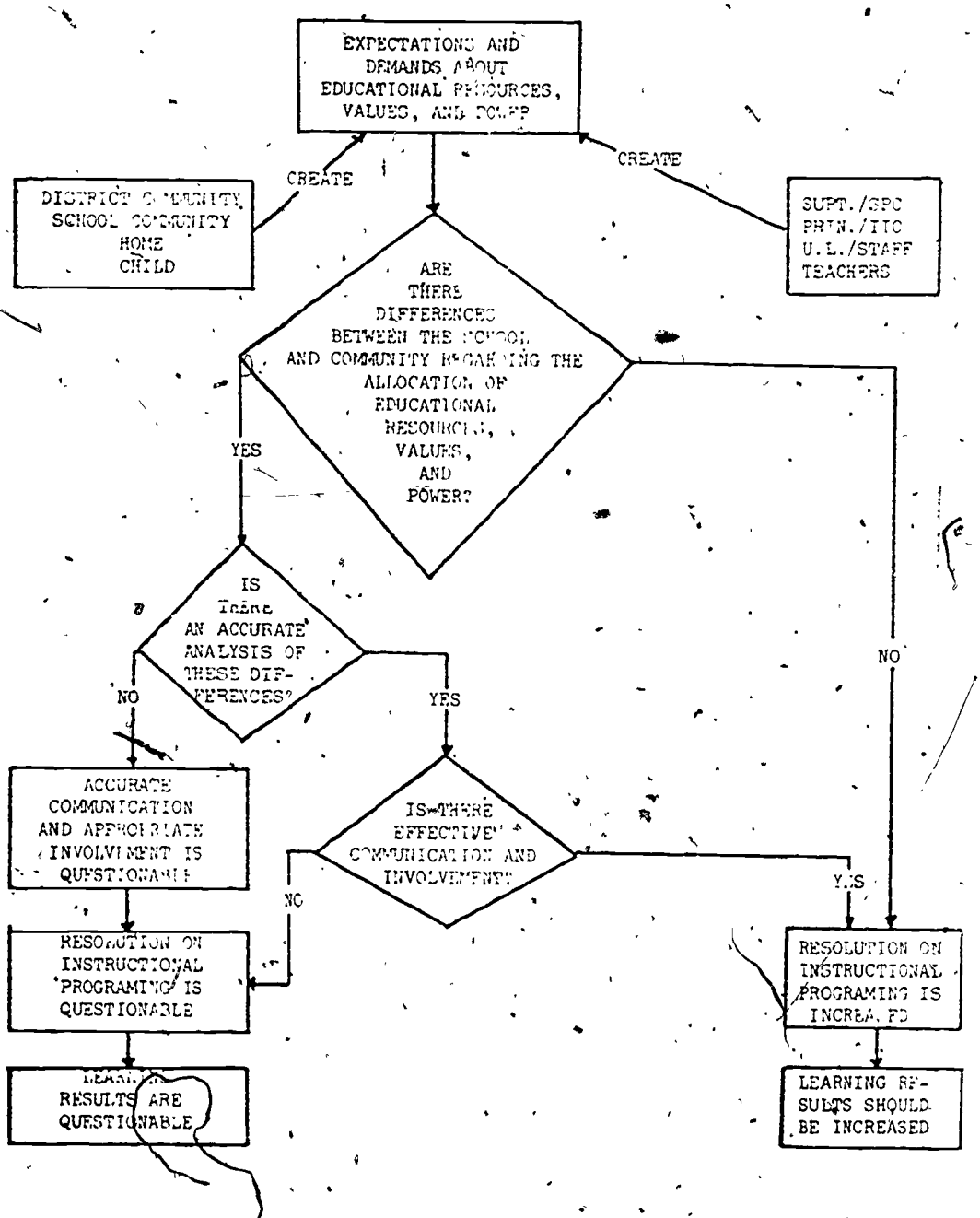
IN HOME-SCHOOL-COMMUNITY RELATIONS

Mode of Conflict Resolution	Relationship between the goals of each of parties	Position of each party toward their goals	Relationship between resolution and the goals of each party
Rational decision	Same	No difference	Both parties achieve their goals
Persuasion	Different	Changeable	Both parties develop the same goal
Bargaining	Different	Not changeable but negotiable	Each party stands to gain and/or lose some of its goals
Power play	Different	Not changeable not negotiable	One party gains its goals while the other party fails

FIGURE 5

FUNCTIONAL INTERACTIONS BETWEEN

HOME-SCHOOL-COMMUNITY AND INSTRUCTIONAL-PROGRAMING



Source: Bowles and Fruth, "Improving Home-School-Community Relations."

and competencies of the home-school-community relations model. Thus, a home-school-community relations program includes the active participation of various subpublics in the formulation of the school's instructional program. Conflict generated among and between various subpublics associated with the allocation of scarce, available resources, the selection of education values, and the distribution of power, is reduced through an accurate analysis of issues, open channels of communication, and active involvement of different subpublics.

Definition of Terms

The multiunit school is the organizational and administrative arrangement of staff and students that facilitates the instructional programing process for individual students as well as other related Individually Guided Education practices. It consists of five distinguishing characteristics:

Multiage grouping of students is an organizational arrangement whereby students of different ages are assigned to each Instruction and Research Unit. Each Instruction and Research Unit usually consists of children representing a three- or four-year age differential.

Nongradedness is an organizational arrangement for the placement of students. The placement is based upon student characteristics and not upon a series of one-year, sequential steps. Thus, nongradedness is the absence of the graded labeling characteristic of the conventional age-graded elementary school, e.g., grade one, grade two, grade three, etc.

Differentiated staffing in the multiunit school consists of the redefinition of existing roles and the creation of one new role, that of the unit leader. Each role in the differentiated staffing pattern is designed to facilitate a collaborative effort by which instructional programs can be planned, implemented, and evaluated.

Shared decision making is the assignment of specific decisional domains to the three organizational components of the multiunit school design: the Systemwide Program Committee at the district level; the Instructional Improvement Committee at the school level; and the Instruction and Research Unit at the classroom level. The decision-making process is facilitated by overlapping memberships within each of the three organizational levels.

Teaming is the collaborative relationship within a unit that is focused upon the planning, implementation and evaluation of the instructional program for the children in that unit. This collaborative effort is facilitated by the differentiated staffing patterns as well as by shared decision making.

The Instructional Programing Model is a cyclic seven-step process used to plan, implement, and evaluate instructional programs for children. This process takes into account each student's beginning level of performance, rate of progress, style of learning, and other learning characteristics appropriate for the school's instructional program. It consists of four distinguishing characteristics:

Instructional programing is the use of a systematic process to develop an instructional program tailored to meet the needs of individual students. Instructional programing is accomplished through the application of the Instructional Programing Model.

Continuous progress is an instructional arrangement whereby instructional programs for each student are based upon learner needs and/or accomplishments rather than upon arbitrarily determined activities based upon chronological age and/or years in school.

Preassessment is a testing procedure used to determine the instructional needs of each student. This procedure occurs prior to actual instruction and may use paper-and-pencil tests, performance tests, work samples, and formal observation.

Criterion-referenced assessment implies that a test measures the attainment of an explicity stated behavioral objective. Success or mastery is achieved when an individual meets a specific criterion level established to indicate mastery of the behavioral objective.

The school-community is the individuals and groups served by a particular school.

Subpublics are identifiable groups in the school-community. The sub-publics used in this research were: parents, aides, teachers, unit leaders, and principals.

Exploratory Questions

Objective One: To describe the characteristics of the multiunit school and the Instructional Programing Model.

1. How are the characteristics defined by members of the school community?
2. How are the characteristics operationalized in the school?

3. What advantages and disadvantages are associated with each of the characteristics?

Objective Two: To analyze the interrelationships between the characteristics identified in Objective One by identifying and describing each in terms of allocations of: (1) scarce economic resources, (2) educational values, and (3) power.

1. Are their allocations of resources, values, and power associated with each of the characteristics?

2. Was conflict, created by the operationalization of the characteristics, associated with the allocations of resources, values, and power?

Selection of School Sites

A beginning step in conducting a case study is the appropriate selection of a research site. Saxe maintains that the appropriate selection is not made from a "random sample from some specified population, but for a case that is a relatively pure example of the phenomenon under investigation."[11] Iannaccone suggests that the best site to apply field methods is a site that permits repeated entries to gather data and refine their analysis.[12]

The two school sites selected for this case study research were drawn from the eight schools participating in the ongoing research effort

[11] Gilbert Saxe, EMPIRICAL FOUNDATIONS OF EDUCATIONAL RESEARCH (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1968), p. 290.

[12] Laurence Iannaccone, "The Field Study in Educational Policy Research," Address prepared for the University of Wisconsin-Madison Conference "Policy Research: Methods and Implications," May 2, 1974 (Mimeographed).

of the Home-School-Community Relations Project of Wisconsin Research and Development Center for Cognitive Learning. The purpose of that research is to develop a model for home-school-community relations. This research was part of that ongoing effort.

The eight schools were selected from schools nominated by the State IGE Coordinator in each of nine states. Prior to soliciting nominations from each state coordinator, the members of the Home-School-Community Relations Project established three criteria to be used as guidelines for school nominations. These criteria were: (1) the use of a variety of home-school-community relations activities; (2) the involvement of parents and other community members in the activities of the school; and (3) the implementation of Individually Guided Education for at least three years.

This researcher contacted each state coordinator to solicit names of schools meeting the three minimal criteria. Each state coordinator was made aware of the purpose of the solicitation as well as being asked to nominate schools displaying a variety of socio-economic and demographic characteristics. This initial solicitation resulted in approximately fifty schools from nine states being nominated.

Project staff members then pared the initial list to fifteen potential school sites. This researcher then contacted the principal of each school to explain the purpose of the project's research effort, how their school was selected, and to gain additional information relating to their program of home-school-community relations. A general description of the school's socio-economic and demographic characteristics was also obtained. Finally, tentative participation in the research effort was sought.

A description of each of the fifteen school sites was made by this researcher to the project staff. Eight schools were finally selected to participate in the research effort. These schools represented a cross-section of socio-economic and demographic characteristics.

The two school sites used in this research were selected from the eight schools as described above. The selection of the two school sites was made after the initial set of interviews had been conducted by six members of the Home-School-Community Relations Project. Criteria used to select the two sites centered upon the school's operationalization of Individually Guided Education. The minimal criteria were: (1) the application of the Instructional Programing Model in at least one curricular area; (2) the organization of the total school into a multiunit design; and (3) multiaged assignment of students to each Instruction and Research Unit.

Information generated during the initial set of interviews was read by this researcher to gain a familiarity with each research site. Discussions were held between this researcher and other project staff members and members of the Wisconsin Research and Development Center for Cognitive Learning who were familiar with the school sites, in order to gain additional information and insight into each of the eight school sites. The two school sites selected were as follows: (1) a suburban middle-class community in a Rocky Mountain State; and (2) a suburban lower-upper-class/upper-middle-class Eastern seaboard community. In the judgment of the project staff the selected sites best met the criteria set forth by Saxe and Iannaccone for the selection of research sites. This researcher had participated in the initial set of interviews in one of the two school

sites selected for this study. Subsequent to the selection of the two school sites, permission from school district officials was obtained to conduct the research.

Data Collection

Data collection began with the initial research efforts of the Home-School-Community Relations Project. During that research, two-member research teams were assigned to each of the eight participating schools. Using a common interview schedule (Appendix A), between twenty-five and forty interviews, each lasting approximately forty-five minutes, were conducted during the more than three days spent at each school site by the research team. Interviewees were selected on a nominational, positional, and random basis. Subpublics interviewed included school staff members--aides, teachers, unit leaders, principals, central office administrators; school board members; students; parents; and non-parent community members. The accuracy and completeness of each case study was verified by the school principal and one other knowedgeable individual who had participated in the research.

Data specifically related to this research were collected using a two-phase process. In the first phase, pertinent data were gathered from the initial research efforts of the Home-School-Community Relations Project. This was followed by a second phase in which this researcher conducted on-site interviews at each school site.

The first phase in the collection of data was the construction of a file containing all pertinent data about each school. This file contained information relative to the general demographic characteristics of

the school and its community, the implementation history of Individually Guided Education at the school site, a description of the school's home-school-community relations practices, and a description of related issues within the school community. Potential interview respondents were identified. Known source documents were also collected and added to the school file. Thus, this researcher was permitted, as suggested by Saxe,[13] to enter the field with a knowledge of the school site that would assist in the sifting and winnowing of data in order to determine the factors relevant to the phenomenon under investigation.

The second phase of data collection consisted of additional on-site interviews with approximately twenty respondents. An open-ended interview schedule was developed to obtain substantive data regarding the operationalization of the multiunit school and Instructional Programing Model.

Cannell and Kahn[14] suggest the use of an open-ended format in exploratory field work. The open-ended format permits the respondent to answer according to his level of knowledge and degree of expertise. The open-ended format also permits both the interviewer and the respondent to pursue a question until it is fully understood by both.

Interview schedules used during the initial set of interviews, field notes, and trial interviews conducted by this researcher were used

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[13] Saxe, EMPIRICAL FOUNDATIONS OF EDUCATIONAL RESEARCH, p. 206.

[14] Charles F. Cannell and Robert L. Kahn, "The Collection of Data by Interviewing," in RESEARCH METHODS IN THE BEHAVIORAL SCIENCES, eds. Leon Festinger and Daniel Katz (New York: Holt, Rhinehart and Winston, 1953), pp. 352-353.

to construct the final interview schedule used by this researcher in the second phase of interviewing. A sample interview schedule is found in Appendix B.

The interview schedule contains two parts. The first part is a one-page cover sheet that was used by this researcher to record the progress of each interview. The one-page cover sheet contained a listing of the nine characteristics relevant to this research along with a variety of probes that could be used to stimulate discussion relating to the characteristics.

In addition, the one-page cover sheet contained a 6 x 9 matrix that was used to check each time the respondent discussed one of the nine characteristics. This served to focus the interview on topics relevant to the research. The matrix also served as a data check when the interview was analyzed. That use of the matrix will be discussed in the data treatment section.

Twenty interviews were conducted at each site during the second phase of data collection. Specific individuals to be interviewed were identified by the school principal and this researcher. The principal also coordinated the scheduling of interviews by contacting each identified respondent and establishing a convenient period of time for the interviews. Table 3 indicates the number of respondents interviewed in each school site by subpublic category and method of selection.

During the interview, each respondent was assured that all data gathered would be presented in an anonymous case study. Throughout the interview all data were recorded in writing on the interview schedule.

TABLE 3

INTERVIEWED RESPONDENTS: SUBPUBLIC CATEGORY AND METHOD OF SELECTION

SCHOOL A

Subpublic Category	Method of Selection		
	Nominated	Positional	Random
Principal		1	
Unit Leader		4	
Teacher	5		
Aide		3	
Parent	4	1	2

Total Interviews Conducted = 20

SCHOOL B

Subpublic Category	Method of Selection		
	Nominated	Positional	Random
Principal		1	
Unit Leader		6	
Teacher	4		2
Aide		3	
Parent	2	2	1

Total Interviews Conducted = 21

All interviews were conducted in the school and lasted approximately forty-five minutes.

Data Treatment

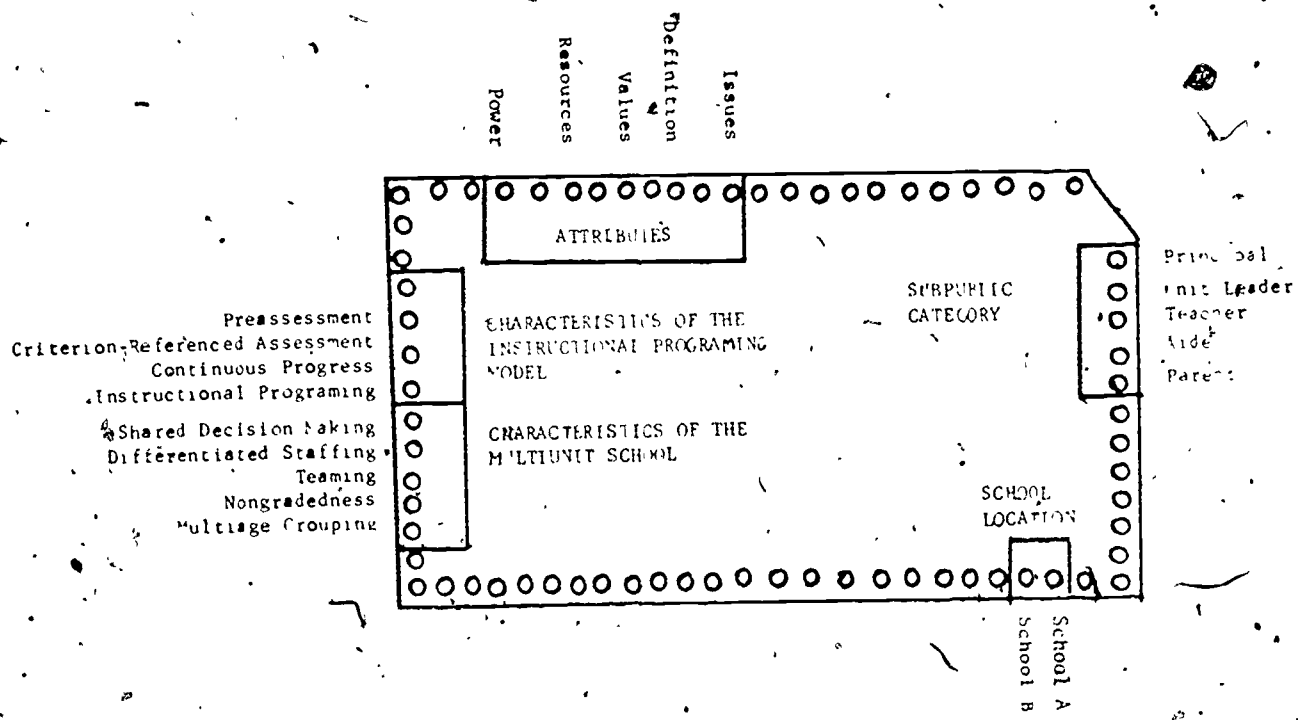
Descriptive responses generated from on-site interviews, discussions held with other staff members familiar with the school sites, and available source documents provided the data base for this research. Since the interview process provided the primary source of data, a data retrieval system consisted of a deck of coded and notched key-sort cards. The key-sort cards were used to record and code the interview data according to the major dimensions of the study. Figure 6 is an example of a coded key-sort card used in this study.

Each interview was read by this researcher to extract comments related to each of the characteristics of the multiunit school and the Instructional Programing Model. Each comment was then typed on a single key-sort card and notched accordingly. Similarly, this researcher then determined if the comment: (1) defined the characteristics; (2) ascribed either a power, value, or resource allocation to the characteristic; or (3) described an issue created by the operationalization of the characteristics. Upon making such a determination, the key-sort card was again appropriately notched. If a respondent ascribed to the characteristics more than one of the attributes as described above, multiple notches were made.

Each key-sort card was also punched to indicate the school site and the subpublic classification of the respondent. The name of the respondent was also typed on each of the key-sort cards. As each interview was

FIGURE 6

CODED KEY-SORT CARD FOR INTERVIEW DATA RETRIEVAL



recorded and appropriately notched on the key-sort cards, it was tallied on the matrix located on the cover sheet accompanying the interview (see Appendix A). This served as a visual check to verify that the interview data were recorded. It also provided a means by which to tally the number of responses that were ascribed to each of the characteristics of the multiunit school and the Instructional Programing Model.

A case study was written to integrate the data generated at each school site. Each case study presented an overview of the school's environment, a brief history of the school's implementation of Individually Guided Education--specifically, the multiunit school and the Instructional Programing Model.

A rough draft of each case study was taken to the school site to be read by the school principal and one other individual selected by this researcher. The purpose of this reading was to verify the accuracy of the data presented in the case study. Several minor discrepancies were reported at each site. These discrepancies were corrected and accepted by the two verifiers in each school site. A final draft of each case study was then written.

Limitations

The set of schools used to derive the sample for this study was originally selected because each school possessed an outstanding program of home-school-community relations. The names of these schools were submitted by various State IGE Coordinators, each of whom possessed his or her own set of biases that influenced the nominations. The assumption made by this researcher that these schools, if they met minimal criteria,

also possessed outstanding examples of multiunit school and Instructional Programing Model implementation may have been false.

Methodological limitations implicit in the use of the interview technique are characteristic of this type of study. Interviewer biases and data interpretation are two areas of the interview process that may have restricted this researcher in an accurate presentation of the data. This researcher has been intimately involved with the development and implementation of Individually Guided Edueation for six years. Sustained involvement for this period of time may have developed biases within this researcher that influenced the flow and direction of questions during the interview process. Such biases would have influenced the interpretation of the data.

CHAPTER III

PRESENTATION OF THE DATA

The two school sites included in this research are presented separately. The same format is used to present the data for each school site. All data is presented in an anonymous format. Each case study presentation has been divided into two sections. The first section provides an overview of the school's environment by (1) describing the characteristics of the community, the school district, and the school, (2) describing activities related to the school's implementation of Individually Guided Education, and (3) highlighting the school's experience in Individually Guided Education prior to the 1974-75 school year.

The second section presents the current operationalization of Individually Guided Education, specifically, the multiunit school and the instructional programing model. Each of these two components of Individually Guided Education has been broken into its operational characteristics. The multiunit school's operational characteristics are: (1) differentiated staffing, (2) multiage grouping of students, (3) nongradedness, (4) teaming, and (5) shared decision making. The instructional programing model's operational characteristics are: (1) instructional programing, (2) continuous progress, (3) criterion-referenced assessment, and (4) preassessment. Specific data related to each of these characteristics is presented by (1) describing the

definition and interpretation of the characteristic, (2) describing the current operationalization of the characteristic, (3) describing the advantages and disadvantages of the characteristic, and (4) describing any issues that created conflict as a result of the operationalization of the characteristics.

SCHOOL A

School Setting

School A is located in a predominantly white, upper-middle class suburb with a population of approximately 20,000 residents. Some families have residential histories dating back to the early 1900's. An estimated fifty percent of the residents occupy some type of governmental position: military, diplomatic, or political office holder. Many of the residents commute to the surrounding communities.

The school district serves approximately 136,000 children with a budget in excess of $177,000,000. The county district is subdivided into four regional areas. Area III includes School A along with 36 other elementary schools. Of the Area III budget, $333,000 has been budgeted for the operation of School A. An additional $436,000 has been budgeted for planned construction at the school.

School A was built in 1914 to serve grades one through six. The single story facility was designed to facilitate the traditional age-graded, self-contained program. In 1952 a new school was constructed to replace the original structure. Major renovation was completed in 1964

to create the existing structure.

Extensive damage caused by a fire in April, 1973, resulted in remodeling to one wing of the school. The following year the school was scheduled to have extensive renovation under the district's renewal and renovation program. This renovation, scheduled for a March, 1975, completion date, will add a gymnasium and refurbish one wing to create an open module. It is currently projected that all students will be housed in the open module while the remaining portion of the existing structure will be used for a variety of other programs: pre-school; special education; and an art laboratory.

The approximately five hundred students attending School A are drawn from a wealthy section of the city. They are served by a staff consisting of one principal, twenty teachers, and eight full and part-time aides and secretaries. District services are provided in the areas of psychological evaluation; speech, vision, and hearing therapy; health services; and orchestral and band instruction.

Implementation of Individually Guided Education

Individualization, through the implementation of Individually Guided Education, was preceded at School A by a set of interrelated circumstances. These existed at the state level through an approaching mandate by the State Department of Education; at the district level with its philosophy encouraging individualization; and at the building level with a school staff attempting to individualize instruction and a newly assigned principal who was committed to educational change designed to

improve education for the children in the school district.

The state mandate was to require each district:

> . . . to provide the foundational instruction that will enable each child, commensurate with his stage of maturity, to read, write, and speak with fluency and clarity; spell, add, subtract, multiply, and divide with meaning and accuracy . . . . the public schools [are] to help each child develop as fully as possible . . . to acquire competence in using the fundamental learning skills and to acquire basic knowledge needed for participation in today's society . . . .

The mandate, in addition to charging each local school district with specific objectives, outlined the district's responsibility in their implementation:

> In planning programs for pupils, each school division should translate these goals into learner oriented objectives, many of which should be measurable.

The focus of the local school district, in part its way of preparing for the approaching state mandate, was centered upon the education of the individual child. Advocated practices within the state mandate and the school district's philosophy were the concepts of nongradedness, continuous progress, multi-age multi-level groupings, free inquiry, individual attention, team teaching, differentiated assignments, variable grouping, and elective units.

At the building level the instructional environment at School A appeared to be "ripe" for change. The staff was team teaching but experiencing great difficulty. Team leaders, selected by the principal, were unable to develop efficient team operations. Excessive amounts of time were consumed in team meetings which drastically reduced each teacher's individual planning time. Insufficient time for planning the

daily instructional program was further hampered by a lack of materials and the inability to adapt existing materials into the individualized program. As one teacher described it:

> There were no "guts" to the instructional program. Teaming was merely icing on the cake. There was nothing in the school that gave it a sense of direction. The staff had no way to determine where they were or where they were going.

The assignment of an assistant principal in charge of instruction occurred in a cloud of controversy. It began when the continuance of the principal of School A became the focal point of growing controversy in the community. A small community group was exerting great pressure on the school district to have the principal removed. During this time, the beginning of the 1971-71 school year, the principal requested a district staff development team to conduct an intensive training workshop at School A. The request was approved and the staff development workshop was conducted in the fall of 1970.

Although School A's student population was not large enough by district criteria to warrant the assignment of an assistant principal, in December of 1970 the district announced the establishment of an assistant principal in charge of instruction at School A. The new assistant principal was a very intense, achievement oriented individual and the effects of her drive and ambitions were felt immediately upon her assignment as assistant principal in charge of instruction. She encouraged and sought the development of behavioral objectives, teaming, and individualized instruction. Later that year the principal announced her retirement. In April of 1971 it was announced that the assistant

principal would assume the principalship of School A beginning the 1971-72 school year.

It was during an educational exhibit early in 1971 that the principal became acquainted with Individually Guided Education. The attraction to Individually Guided Education stemmed from the principal's belief that this was what they were already attempting at School A but that Individually Guided Education provided a more systematic organization of the staff and the instructional program.

Subsequent to the exhibit the principal sought information concerning Individually Guided Education from the Wisconsin Research and Development Center for Cognitive Learning (R & D Center). Numerous contacts with a staff member of the R & D Center led to a request from the principal that School A become a part of the national installation effort being conducted and subsidized by the R & D Center. This request and subsequent requests were denied because the state was not participating in the R & D Center's implementation effort.

During this period of time the principal had established a Parent Advisory Committee at School A. One member of the Advisory Committee was an official of the U.S. Office of Education and had recently visited the R & D Center. This relationship provided an opportunity for a dialogue between the individual and the principal focusing upon the difficulty in gaining recognition by and services from the R & D Center. (At that time the R & D Center was funded by the U.S.O.E.) Shortly thereafter the principal was invited to send a team of staff members to a three-day Principal-Unit Leaders Training Workshop in a neighboring state. The

workshop was being sponsored by the R & D Center and the State IGE coordinator. When the principal and several of the School A staff members arrived at the workshop site they were told that the workshop had been cancelled. In an effort to correct the error the R & D Center's implementation team conducted a training workshop at School A on August 30-September 1, 1971 for the entire school staff.

The First Years of Individually Guided Education

The first year of Individually Guided Education, 1971-72, was a year marked by change. That change, under the direction and leadership of the principal, occurred swiftly for both the staff and the school community. It began by organizing the school into a multiunit organizational design. Some modifications had to be made in the recommended multiunit organization because of local constraints on staffing, particularly in the employment of paraprofessional personnel. "All we had were the teachers" is the way the principal described the first year's staffing patterns. Curricular change occurred through the implementation of the Wisconsin Design for Reading Skill Development, a program designed specifically for IGE schools.

During the first year of Individually Guided Education it became increasingly clear to the principal and the staff that local constraints were preventing the staff from implementing Individually Guided Education as recommended by the R & D Center. Most noticeable was the school's inability to develop a differentiated staff and the school's lack of appropriate instructional materials and instructional hardware.

In addition to these constraints a survey conducted by the staff in March of 1972 showed that while the needs of many children were being met there was also a significant proportion of the student population that had identifiable educational needs that the staff could not meet (Table 4). The survey also showed that in the curricular areas of reading, language arts, arithmetic, and study skills, between 28% and 50% of the student population was identified as below grade level (Table 5).

The inability to develop a differentiated staff, the lack of adequate instructional materials, and the inability to accommodate identified educational needs provided the primary motivation for the development of an IGE program specific to the needs of School A.

This was a program designed to:

> (1) . . . . provide for the grouping of children on the basis of diagnostic procedures (criterion-referenced tests) keyed to specific behavioral objectives and (2) would provide instructional approaches, methods, personnel, and materials to the diagnosis. The groups of children would not remain stable, but would be based on continuous assessment of criterian performance of each skill in mathematics and reading. Children in Kindergarten through their fourth year in school would be included.

Funding for this program was applied for and granted through the state's pilot project program. It was approved as a three year project and is currently in its third year of operation.

The school year 1973-74 began as usual but during the second semester the principal was granted a professional leave of absence. A staff member from another district school was assigned as acting principal for the remainder of the school year. The administrative style

TABLE 4

SURVEY OF NEEDS (GRADES K-5)

Category	Number of Children[a]
High risk on the Metropolitan Readiness Test, both 1970-71 and 1971-72 testing	11
Learning disability (psychological evaluation completed)	11
Auditory discrimination problem	6
Adapted curriculm required to varying causes	16
Gross and fine motor problems	8
Visual perception problem	4
Visual memory problem	1
Hyperactive, highly distractable	10
Emotionally immature	6
Psychological referrals waiting to be tested	12

[a]Many of the children have multiple needs but each is listed in their prime area of weakness.

TABLE 5

PERCENTAGE OF CHILDREN FUNCTIONING BELOW GRADE LEVEL[a]

Area	4th Year	6th Year
Total Reading	36%	28%
Total Language Arts	44%	41%
Total Math	50%	36%
Composite	36%	33%

[a]Based upon SRA Tests administered in March 1972.

of the acting principal accentuated feelings that staff members had over the administrative style of the principal on leave. A group of teachers that had been very supportive of the principal were very frustrated with the acting principal. Conversely, other staff teachers found the acting principal a welcome relief after experiencing frustration with the principal. When it was announced in July, 1974, that the principal would not be returning to School A upon the expiration of the leave of absence but rather reassigned to another district school, indications were that some teachers would be requesting a transfer, if the acting principal was assigned the principalship of School A. It was also indicated that some teachers were going to transfer if the principal had returned to School A after the leave of absence.

School A: The Beginning of the 1974-75 School Year

The school year began on a note of unsureness, confusion and change. Building construction had been delayed and the use of many school facilities, particularly the media center, was not possible. Extended use of the portable classrooms made movement of children within the units more difficult, particularly with the approaching cold weather. Noise from the construction along with the general disruption created by workmen and equipment being moved in and around the building created disturbances during the day that were not the most conducive to good learning conditions.

The school also began with a new principal. The appointment was made in August, just prior to the opening of school. The newly assigned

principal had been an assistant principal in another district school. The new principal was a quiet but forceful person who, according to a teacher, "served as a resource person, not a dictator." This represented a noticeable change in administrative style. The difference was pointed out by another teacher who spoke of the tension created during the former principal's tenure at School A.

She stated:

> Our first couple of years we were really driven. We made a good showing and parents got off our backs. We gave up social studies and science to improve reading and math, but we really made them learn. Everyone [Who?] kids and teachers were unhappy, too much pressure. [Where did this pressure come from?] The principal and program.

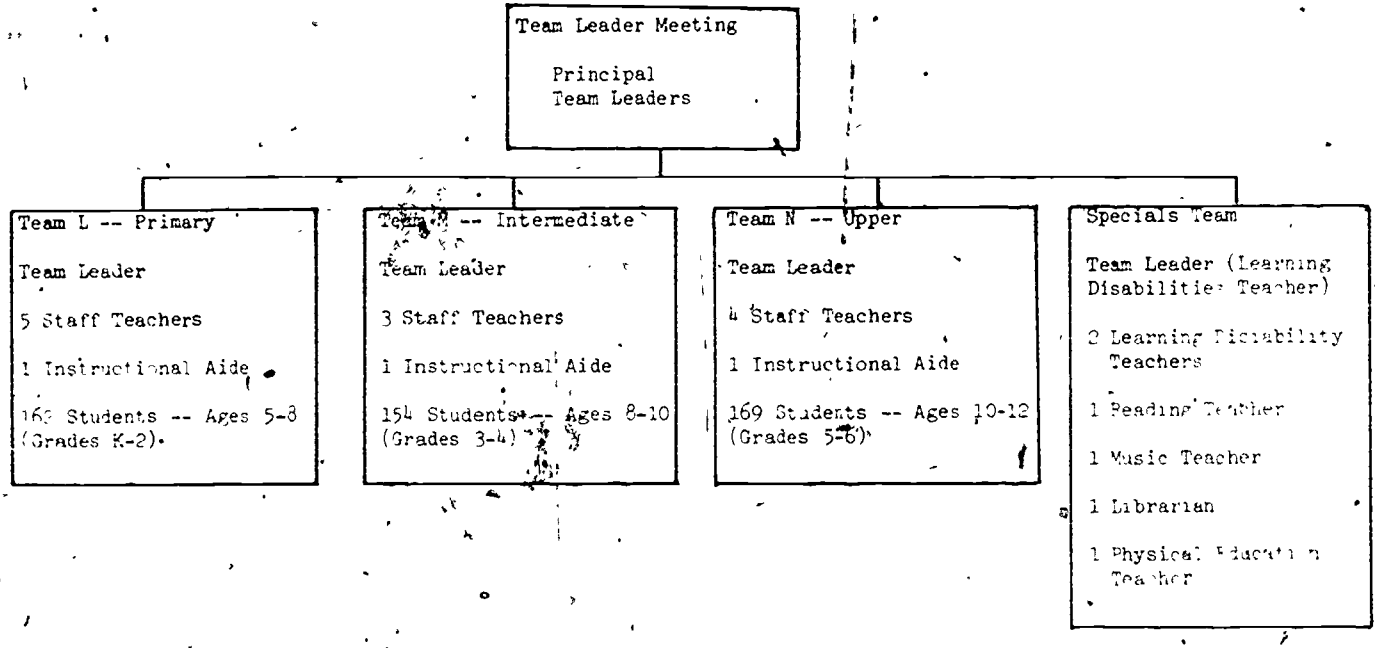
The staff was also beginning the year following a year of interpersonal conflict among teams. Resolution of these difficulties began at an informal meeting called by the staff teachers the first week of school. Discussions led to a formalized disciplinary policy, the centralization of materials and supplies, and the expression of a need for open communication between teams. Although it was early in the school year it was felt that the difficulties had lessened.

The Multiunit Organization of School A

Figure 7 illustrates the school's multiunit organizational pattern in September, 1975. This design included two decisional bodies: one at the school level, the Team Leader Meeting (Instructional Improvement Committee); and one at the classroom level, the Team (Instructional and Research Unit). The design incorporated differentiated staffing, multiage grouping of students, nongradedness, shared decision making, and teaming.

FIGURE 7

THE MULTIUNIT SCHOOL DESIGN OF SCHOOL A



Personnel Not Assigned to Any Team

1 Full time School Secretary

3 Part Time Secretaries

1 Clinic Aide/Secretary

Differentiated Staffing

Four distinct roles were utilized within School A's multiunit design: principal, team leader, staff teacher, and aide. None of these four roles was formally defined.

Principal

The school district mandated the building principal accountable for instructional improvement. The principal interpreted this by seeing the role as providing a resource function. Through this style, the principal maintained, the staff would be able to provide the best programs for the children. The parents, perhaps because of a carry-over from the former principal's tenure at School A, saw the principal's role differently. One parent reported, "The principal has a strong say in what the curriculum should be and will be." "[The principal] determines [the] instructional program," according to another. The principal admitted that the role of the principal was unclear and felt that "all roles need to be redefined."

Team Leader

Two general team leader functions were present, operational and liaison. The operational function carried with it the responsibility for keeping the team together. The team leader was, according to a teacher, "the one that does the paper work;" according to another, he was "the one who allocates the use of aides." "Coordinates work schedules, keeps track of materials, and handles complaints," was the description provided by another teacher. One teacher's description of

the team leader as having "organizational responsibility but no decision-making responsibility" characterized that function of the team leader role. A parent simply said they are the team's "overseer."

The liaison function was directed at maintaining communication between the team and the Team Leader Meeting. A teacher, in describing this as doing nothing "but bringing back information from the Team Leader Meeting to the team meeting," echoed the feeling of the team leaders.

Interestingly, a parent reported that the children suffered because "too much time for planning by the team leader" took away from the time for children. In addition, she said, it "gets expensive if that's all you want them [team leaders] to do."

Although this role is in the differentiated staffing pattern, the principal reported that additional monies were not given to those assuming the team leader position. Resistance was within the local education association. They maintained there was and would be only one salary schedule for teachers. As a result there were no formal organizational rewards, monetary or otherwise, provided when assuming this role.

Staff Teacher

The staff teacher role had not altered markedly from the teacher's traditional role but rather there had been a change in the environment in which the teacher works. Teachers met and planned the instructional program for many children. Sharing of materials, ideas, and suggestions occurred through the teaming arrangement of the organization. Access to paraprofessional assistance made it possible to spend more time on

instruction and instructionally related tasks by reducing the time spent on housekeeping chores.

Aide

The success of the program is in part contingent upon the use of aides in both the clerical and instructional setting. A team leader stated, "A good secretary is needed to handle the record-keeping. A secretary is needed if IGE is to succeed." A parent said that "their use in instruction [is] great." "The program could operate without aides but not very well," was the feeling expressed by another.

The aide was assigned to the teams and was responsible to the team leader. Job discretion accorded to the aide was different in each of the teams. The amount of discretion appeared to be linked to the aide's degree of professional training and experience in education. In the upper team the aide was a certified teacher and was usually on her own once the objectives for her assigned student group were determined. The aide had the ability to decide what materials and methods were appropriate for the children that had been assigned to her. This discretion was not given to aides without a formal educational background.

Queries as to the motivation of becoming an aide evoked a variety of reasons. However, one general response was reiterated: they wanted to find out what was happening at school. One comment was subtle: "I got int the aides so that I could be freer with the staff. The teachers are becoming more human." Another comment was very direct: "[I] volunteered to be an aide to really know what is going on, how the staff copes with school."

Multiage Grouping of Students

Multiage grouping is the practice of placing students of different grade levels within the same group and occurred at two levels. The principal first assigned the children to each team. Following this team assignment it was the responsibility of each team to continue grouping for homeroom and instructional purposes.

The first assignment of children to the unit by the principal was subject to parental requests. Noted was the ability of the parents to "shop" the school in order to discover the best assignment for their children. This "shopping," as it was referred to by the staff, occurred through parent visits, direct observation of teachers, word-of-mouth, and helping in school. A parental request for student placement in a specific team or with a specific teacher or teachers was made to the principal. The principal brought the request to either the team leader or the team for a decision. Whether or not the parental request was honored was dependent upon three considerations: (1) What is best for the student? (2) What is best for the teachers? and (3) What is the best way to make the parents more cooperative?

At the team level multiage variations were created through the teams' operational practices as they exercised their student grouping responsibilities. The primary team, Team L, utilized a multiage pattern, as defined, in most curricular areas. Groups were formed on the basis of identified needs, ability, personalities, and learning style. These procedures were, according to the team leader, "the way to go. It solves the problem of what to do with the kids who don't fit in a group."

The intermediate team, Team M, like the primary team incorporated the multiage pattern into their instructional groupings. They had, however, narrowed the definition and basis for grouping. Almost all instructional groups were ability grouped. Ability grouping was described by the team leader as follows: "One group may be high third and low fourth, while another group may be high third and high fourth."

The upper team, Team N, incorporated very little multiage grouping of students, "because," according to the team leader, "the sixth graders have to have a chance to be big cheese." The homeroom groups, therefore, were by grade level. Instructional groups were formed by ability levels within grade levels. One group in math might be high fifth while another group might be average sixth. In addition to ability levels, the team considered discipline, boy-girl ratio, and the students' degree of independence when creating the groups.

These multiage grouping practices represented a change from those of the previous year, a year in which multiage grouping was similar to the practices of the primary team. One teacher, when asked about the current practice of ability grouping within grade levels summed up the general feeling of the team: "Better for the kids if done this way. No real reason. We are just going to try it."

Despite the many variations in multiage grouping practices there was a favorable feeling toward the practice as well as seeing it as an improvement over the conventional age-grading practices. Multiage grouping, according to one parent, was "great, good for emotional maturity, social reality, and children that are behind because they are not chastised as much." Another said that "the homeroom could be graded but

after that you could put them anywhere you wanted and parents would not care." Similarly, another parent believed that "using chronological age as a ruler is the dumbest thing education has ever done." Staff comments highlight teacher benefits. One teacher reported there was a "better utilization of teachers and time." It promoted decisions in program development that accommodated teacher and learner needs, according to another.

A few respondents were not as favorable to multiage grouping. One parent reported that the principal said the reason for multiage grouping was that "we want school to be more like society," but she rebutted: "I don't agree. You have to be careful when you multiage group. Kids get upset. It won't drastically alter academic levels." Another parent described the result of average third graders working with high second graders. She stated, "The third graders think they are dumb. This is shielding them from the real world. Their day of reckoning will come in junior high school." Despite the many benefits of multiage grouping, a similar understanding of what it was, and an overwhelming belief that it was a better way of grouping children, the parents, almost without exception, used the conventional "combination classroom" as a reference point. "It is a second- and third-grade combination," according to one parent. Several others saw it as the "traditional combination class." Another defined it as "combined grades as is traditionally taught."

Nongradedness

As defined by a parent, nongradedness was "first and second graders in the same room. Not making each child do the same thing."

"Placement by ability and not age" was the description offered by a teacher. A parent saw nongradedness as "children of different grade levels working together." Interestingly, most descriptions of nongradedness incorporated the use of grading. A teacher offered a possible explanation:

> Wasting too much time on nongradedness. Parents don't want to give it up and county won't let you give it up. The county requires reports to be submitted with grades, parents are reported to in a graded fashion. We may say we are nongraded but, 'ha, ha,' we are not.

This explanation was given by a staff member but also extended into the parental community. One parent observed that "this nongradedness may be emphasized but not carried out here." Another felt that "a lot of parents want to know what grade their children are in."

Reported advantages of nongrading were minimal. A teacher felt that "it doesn't frustrate the child. . . challenges the kids." A parent felt it enabled the staff to treat different personalities accordingly. Although she attributed this advantage to nongrading she also felt it became a "weakness" in the program when students had to leave School A to go to a graded school. "This is important," she stated, "because of the school's high transiency level." Another parent said that nongradedness was "great for fast and slow kids. Not so great for the average, they are forgotten. My kids are above average." The primary team leader reported that some difficulties were created at the beginning of the school year: "Kids were confused; initially they didn't understand where or why they belonged to a group. Didn't know if they were a first grader or a seven-year-old."

In addition, it was reported that the use of the multiage grouping practices and the use of standardized test scores in reporting pupil progress resulted in stereotyping of teachers as "graded." Describing the staff, a parent said, "Some are third-grade teachers, some fourth. Some are third-grade teachers that teach slow children. Some are third-grade teachers that teach average and high kids.

Teaming

The current organization of the school into teaching teams began prior to the implementation of Individually Guided Education and the school's organization into a multiunit design. Profits derived from teaming were reported to help both students and teachers. A parent reported that a child "does not have to be stuck with only one teacher." "It's good, creates a family group. Sometimes they [teachers and children] can relate to someone better than others," was the comment offered by another Another parent felt that there are "more minds working on the same efforts. Everybody benefits. The teachers are more inspired to do more in a group." Another believed that "a teacher can't prepare and conduct an individualized program for each child." Similarly, a team leader highlighted the importance of teaming as "providing for more than one teacher to influence what happens to children in the team." Other staff members reported that teaming developed tolerance, encouraged closeness among staff members, exposed staff to different teaching styles, and generally improved the ability to work with other teachers.

Nevertheless, potential problems in teaming were noted. The principal felt that when teams are created "there is always the danger of forming cliques." A similar concern was raised by a team leader: "when you have four teams in the school you forget you are a school staff." Another team leader said: "Because you are a team there is too much to do in so little a period of time. A difficulty with teaming is that it is difficult to provide adequate feedback to children."

Teaming at School A was designed to allow all members of the team an opportunity to participate in the development and execution of the instructional program. This was usually done at the team meeting on Monday afternoons. This was time provided through early dismissal of students. The team meetings focused upon the identification of student needs, the formation of instructional groupings and the assignment of staff responsibilities. One teacher felt that teaming permitted the "team [to] decide their own fate, who teaches what, who teaches what children, and what to do with children that finish their skills."

This year was also seen as the beginning of an effort to improve the interrelationships among the teams. The change in material and supply availability is an example. In previous years each team maintained its own store of instructional materials and supplies. This included everything, including pencils, pens, contructional paper and tape. Little, if any, sharing of these supplies was reported to have occurred. At the August meeting called by staff members to address the concerns causing conflict between teams it was decided to create a central supply area for those materials shared among all staff members. This now

became the practice at School A. Otherwise, according to one team leader who was reflecting on previous practices, "nobody knows what is floating around."

Shared Decision Making

The decision-making structure was in a state of transition because of the principalship change. In prior years the former principal had maintained a very tight-fisted decision process. That process, described by a teacher, had meant "we were told what to do, when, and how to do it."

The two decisional components in the multiunit organization recommended by the R & D Center were present in the multiunit pattern implemented in School A. These were the Team Leader Meeting at the school level and the Team at the classroom level. The Team Leader Meeting was an irregularly scheduled meeting in which the principal and team leaders met to discuss school-wide concerns. The irregularity of the meeting was due to the fact that the school year had just begun and the new principal was in the process of assessing the operations of the school.

The specific agenda items could come from several sources. The principal and team leaders had direct access to placement of items on the agenda. Staff members could give the team leader agenda items for the meeting if they had a school-wide implication. Concerns for the year 1974-75 focused on setting the school's master schedule, determining who exits which door, a review of the fire drill guidelines, and establishing the lunch schedule. The importance of the decisions at this level were not perceived as significant. When asked to identify the important decisions made by the Team Leader Meeting one team leader

said "I can't think of any." Another said, "Very few decisions are made at the Team Leader Meeting."

Most decisions were made by the team during its team meeting. The only constraints creating decision boundaries were established by county guidelines. It was reported that most instructional decisions were made at the team level and a voice in those decisions was available to all members. This included determining the specific curricular offerings, within county guidelines; forming student groupings; and assigning teachers to the student groups. General day-to-day operations were also a decision area of the team.

This wide range of decision parameters was new for the staff in comparison with previous years. The new principal encouraged the increased participation but saw it as an evolutionary process. She felt, because of past practices, that it was necessary for the staff to improve decision-making skills before being given the desired participation in decision making. One illustration of increased participation in "important decisions," according to the principal, was the change in the procedures for requesting materials and supplies. Past practices permitted minimal participation. This participation was limited to providing the principal with a request for supplies and materials. That was the extent of participation until the following year when the teachers returned to school to find out what materials were received. The suggested procedure to be utilized in 1974-75 involved staff in the total process. Each team was to compile a material and supplies request. The team requests were to be compiled, duplicate materials eliminated,

and needed changes made at the Team Leader Meeting. It was also felt that there would be an increased awareness of available materials within the school.

The Instructional Programing Model at School A

Instructional Programing

Instructional programing began in the spring of 1971 when the school staff formulated curricular objectives in Language Arts and mathematics. These objectives provided the basis upon which a district committee developed the current list of approved county-wide objectives. These objectives were for all the curricular offerings in the school district. By 1974-75, the objectives had become the basis for the instructional program at School A. No effort was made by the staff to specify which objectives were to provide the focus of the school's program nor was any effort made to coordinate the achievement of these objectives from a school-wide perspective. With curricular decisions the responsibility of each team there was little coordination and continuity between each team's instructional program. A teacher's statement characterized the genuine feeling described by many staff members. She said, "We have become team oriented, don't really know what the others are doing. There is no continuity between teams."

Following the selection of objectives by each team, assessment was undertaken. Assessment of students utilized both standardized and criterion-referenced formats. Commercially prepared diagnostic tests were most often used to identify needs except when ready made criterion-

referenced tests were provided in curricular materials. The use of the Wisconsin Design for Reading Skill Development materials is an example of this exception. The standardized test was used to measure pupil achievement and children with special learning needs.

The testing procedures and practices engendered some suspicion among parents. One parent queried the testing results because it was difficult to understand how her child scored 97% on the science section of a standardized test and only 12% on the reading portion. Her concern focused on the fact that the science test required reading. She asked, "If my child is so bad in reading how did the score come out so high in science?" She went on to say that "testing tends to make you see the child as a graph." Another parent reported, "Interim tests were made to make parents think kids and school are doing well."

The preassessment results provided the essential ingredients used by the team to form instructional groups. These groups were consistently referred to as "achievement and ability" groups by staff and parents. The groupings made as a result of the criterion-referenced tests provided by the Wisconsin Reading Design were also referred to in the same fashion as those formed resulting from other diagnostic or standardized test scores.

Following the formation of groups and the assignment of staff to these groups, it was the responsibility of each individual teacher to design the specific instructional activities for those children. Each teacher had the responsibility to select appropriate methodologies and materials. The teacher could also form smaller subgroups. This was the

place where the staff felt individualization of instruction best occurred, with each individual teacher providing for differences among children.

Continuous Progress

Continuous progress was not implemented at School A and the few that referred to it usually described it as nongradedness. One parent said it was "children working at their own achievement levels." It was where children "are placed by ability, not because of age," according to a teacher. Another teacher described it as "merely progressing by speed."

Criterion-Referenced Assessment

Except within the Wisconsin Design for Reading Skill Development, criterion referencing was not an assessment practice. In spite of reported benefits afforded criterion referencing, resistance to its use appeared to be associated with the staff's perception of community norms. These perceived norms required a comparison of student growth with grade level norms. One teacher stated, "You have to have standards to let children know how they stand in relation to others." "This is what we [parents] need," reported a parent; "parents should not have been required to come and have the score explained; some will not understand it." A teacher said that even the results of the Wisconsin Design for Reading Skill Development tests were translated into traditional grade-level thinking."

Preassessment

A parent described preassessment through the use of an example:

"If we take a fraction test and pass then we can go on to decimals." "Preassessment," said one teacher, "gives us the advantage of knowing where to place each child; into what group to place the child for instruction." Another claimed preassessment was "good for teachers" while a team teacher reported that "kids take it in stride."

Preassessment was a concern of parents. One parent reported that the "concept is excellent" but the practices used at School A were upsetting. Summing up the frustration she said, "I just hope you test less. Try and get more from less answers." The frequency of pretests was also part of that concern. The children were "the most tested kids in the world," according to a parent. Relating to her teaching background and previous teaching experience she maintained that "if you look hard enough you can find a test to show what you want to show." She said an example would illustrate her point:

> The Metropolitan Reading Readiness Test was given and the school had very good scores. However, this is very misleading because half of the kids could read before they came to school . . . [in another case] the school gave one achievement test and the kids didn't do very well so they gave a different test; the kids did much better.

Test frequency was also reported to have had an impact upon the children. Because of test frequency the implication was made that children learned "how-to" take tests and could therefore "beat the system." And children "are masters at that," according to one parent.

SCHOOL B

School Setting

The east ridge of the Union Mountains provides the backdrop for the city of Jefferson. The 17,000 students attending the local state university are included in the city's 46,000 population. Agriculture and education provide the primary source of income in the city's economic base.

The year 1959 marked the reorganization of the city school district. In addition to serving 46,000 residents of Jefferson the school district now serves 24,000 residents in the surrounding areas. The current student population is 15,000, an increase of 8,500 over the past ten years. These students are housed in three high schools, five junior high schools and seventeen elementary schools, four of which are one-room mountain schools.

School B is located in the rapidly expanding southern limits of Jefferson. It was built in 1970-71 and opened in September, 1972. The popular open-pod design provides the architectural arrangement of the school's facilities. Two large open instructional pods and the school's office facilities encircle the central Instructional Media Center. The kindergarten area is an open area adjoining one of the larger instructional pod areas.

School B's attendance area, which encompasses both city and county areas, draws students from three different housing developments. The school itself is located in Prairie Way. The development, now seven years old, is characterized by one resident as "high quality" housing.

Current selling price for homes in this area range from $30,000 to $43,000. The nearest development to Prairie Way is located approximately one-half mile east. This area, Sunset, is currently permitted to send their children to School B on an annual basis. This is subject to annual enrollment at School B; if the enrollments exceed the school's capacity, they are the first children to be relocated.

The second area served by School B is Mountain View. Located two miles southeast of Prairie Way, these homes sell in excess of $40,000. If Prairie Way were categorized as lower middle class, Mountain View would be considered upper middle class.

The third area served by School B is Parkway. Located about three miles southwest of Prairie Way, lots in Parkway are much larger than in Prairie Way or Mountain View. While the houses are approximately the same price range, $35,000-$55,000, the main advantage to living in Parkway is that larger lots permit each family to stable their horses.

Implementation of Individually Guided Education

As early as 1968 plans were being made for a new elementary school to be located in the city's rapidly growing south suburban area. Decisions during that planning phase outlined the architectural design (the open pod) and the educational approach (the community school). The economy of the open pod construction was initially used to justify its selection. A successful bond referendum in 1968 provided the funds necessary to construct the school. The new school, School B, was scheduled to open in fall of 1972.

A small group of parents requested a meeting with a district central office administrator that signaled the beginning of the selection of the specific educational program for School B. At this time their orientation was for an alternative form of education. The administrator suggested that the group visit one of the district's schools, School C, and talk to its principal about their program of Individually Guided Education. Following this suggestion such a visit and discussion was held.

In the spring of 1972, a meeting was held between the same parents and the central office administrator. This meeting now focused upon a specific program for School B--Individually Guided Education. The initial efforts of this small group of parents generated a minority of parental support for the implementation of Individually Guided Education at School B. This group was estimated to include between twenty and thirty parents. Underscoring the impact of this small group, one parent said, "If there hadn't been a minority in favor, the whole system would have broken down."

The specific direction for the program at School B began with the transfer of the principal from School C to School B. In the spring of 1972 the principal began staffing School B. The process of staffing served to begin the crystallization of the program when the principal was permitted to bring four staff members from School C to School B. The direction of the program was finalized when the staff voted in April to establish Individually Guided Education at School B.

Inservice began in May of 1972 when the principal and the unit leaders attended a Principal-Unit Leader Workshop. Following this workshop a series of informative meetings were arranged and conducted throughout the spring and summer for those School B staff members who were living in the area. A few staff members were completing contractual obligations in other school districts and could not attend these meetings..

June also marked the beginning of parental inservice by conducting a meeting to explain the program at School B. In this large group meeting, the parents were presented with their initial introduction to Individually Guided Education by means of a film and a skit. At the conclusion of this meeting, which was attended by approximately three hundred parents, a small group was highly supportive, another small group was not in favor of the program, and a majority was still seeking more information.

Continuing throughout the summer several informal staff meetings were held to prepare for the upcoming school year. In August the total staff met for one week to finalize plans and preparation for the following week, the opening of school. Although the staff was not paid for this week of inservice the district did provide a lunch at the school for all those staff members participating in the workshop. School B opened the following week, following a one day delay due to unfinished construction, with a new school; a new staff; a new school population; and a new program, Individually Guided Education.

The First Years of Individually Guided Education at School B

School B opened with several events that oftentimes plague a new

school. Unfinished construction delayed the school from opening, although by only one day. In addition, the student enrollment had reached 480 by the Christmas recess; the school was designed to house 350.

Little could be done to solve the construction delays but parents did mobilize in response to the overcrowding. Parental coalitions representing the various housing developments formed, each trying to make sure their children would not be excluded from School B. Following a series of meetings between the various parent groups, central office administrators, and school board members, a solution was reached to alleviate the overcrowding conditions.

Another crisis occurred when the parent-staff committee on pupil reporting recommended that students be released early every Thursday afternoon so teachers would have time for planning and conferences with parents. Negative response directed to the school district's central office forced them to request School B demonstrate parental support for the recommended plan. Returns from a mailed ballot in November showed that 84% of the returned ballots were in support of the proposed plan. (242 ballots were returned from the 285 ballots mailed.)

The following year a small group of parents requested the transfer of their children to another elementary school in the district. The requests for transfer were honored and, in addition, the district agreed to provide bus transportation for the students. Specific reasons for the transfers were varied.

One family was reported to have taken their children out because of pressure from the neighbors. Another family transferred their children

because of a lack of basics being taught.

In an interview with one parent that had withdrawn her children, many instructional issues related to the withdrawal appeared to mask more personal reasons. Multiage grouping was a problem because she was concerned about the effect that the sixth-grade girls chasing the boys would have upon the fourth-grade girls in the same unit. While she did report this concern she also stated that there was "a great advantage" to the grouping patterns at School B because "children do learn by needs." She also reported that her daughter was very happy at school but was not getting the basic skills. She reported further that the school lacked follow-up with parents and students. That was substantiated, according to the parent, by a visit to the school in which she "saw kids in reading class throwing spit balls" and "too many children just fooling around."

After many of the instructional reasons appeared to be out of the way, she began to focus on reasons of a more personal nature. She repeatedly referred to the fact that she was a teacher and had taken graduate courses in individualizing instruction and had also sought employment in the school district but had always been denied employment. When asked to identify the "final straw" that made her request the transfer of their children she said, "My husband had been after me to take some action." She said that her husband maintained their daughter could not write or spell. She also stated that her husband had never been in School B.

In a related interview, another parent reported that they withdrew their son because of difficulties created in the grouping of students.

The grouping did not permit their son to be with his friends. A personality clash was also reported to exist with a teacher. Withdrawal was also prompted by the lack of academic achievement of the basic skills.

The spring of 1974 marked the beginning of a change in administrative leadership at School B signaled by the resignation of the principal. Citing personal reasons, the departure of the principal created much speculation about the direction of IGE in the district. The staff felt the selection of the new principal would be a clue to the district's support of the program. In July, 1974, the school board announced that a staff member at School B would assume the principalship beginning with the 1974-75 school year.

School B: The Beginning of the 1974-75 School Year

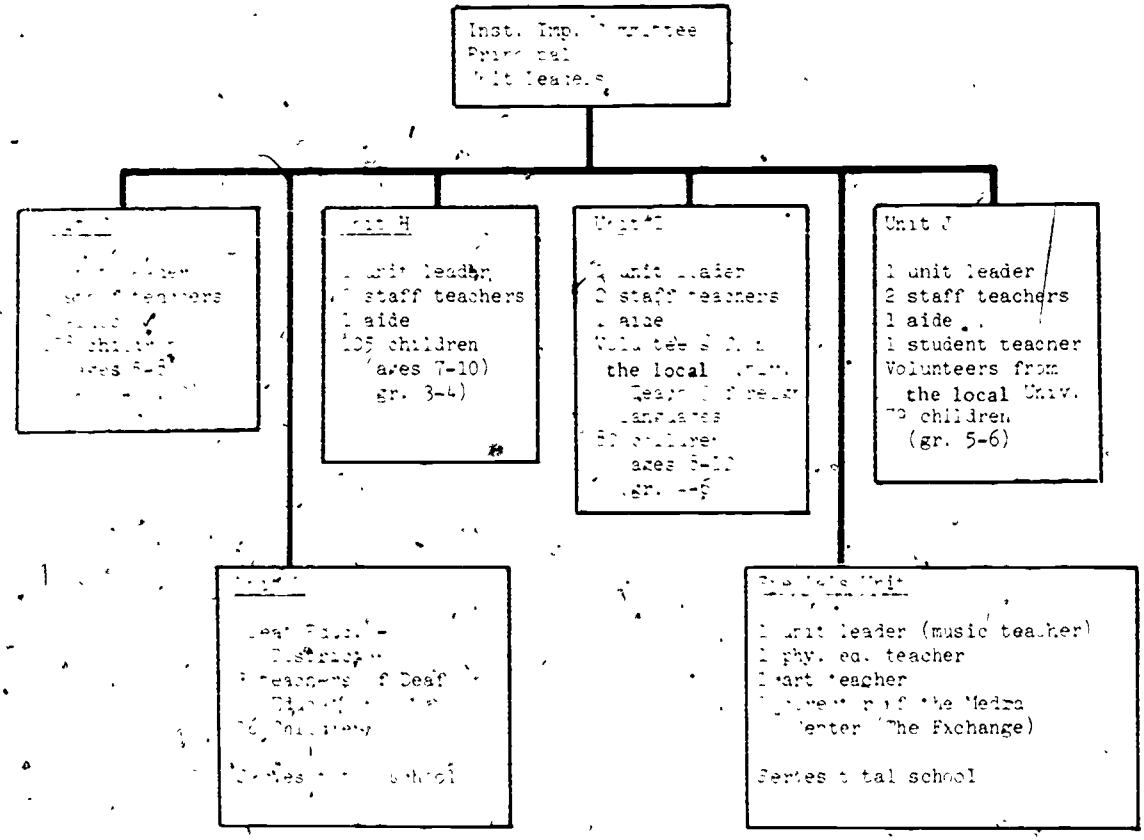
The school year began with a new principal. The administrative change-over was orderly. This orderly transition was facilitated by the new principal's previous employment as a staff member of School B and the administrative style did not represent a significant change from that of the former principal. The school continued to operate in much the same fashion as it had the two previous years.

The Multiunit Organization of School B

The school's multiunit organization in 1974-75 is illustrated in Figure 8. The design included the two organizational components recommended by the Wisconsin Research and Development Center: The Instructional Improvement Committee at the building level and the Unit at the classroom level. Practices embracing differentiated staffing, multiage

FIGURE 8

THE MULTIUNIT SCHOOL DESIGN OF SCHOOL B



grouping of students, nongradedness, teaming, and shared decision making were incorporated into the operationalization of the multiunit organization.

Differentiated Staffing

The staff's desire to accept and accommodate individual differences among teachers resulted in a staffing arrangement where roles and responsibilities were often related to those individual differences. The integration of the resultant, loosely defined differentiated roles--principal, unit leader, teacher, and aide--was facilitated by the overlapping of their accompanying tasks. Sharing of tasks became a reasonable way of avoiding hierarchical gaps between the various role positions. Capsulizing her role, the principal said she plays "just another role with different responsibilities. Just one of them but with a different day-to-day routine." This same general feeling was also conveyed by a unit leader. She stated:

> All the roles in the school fit together. No real differentiation. We all do many of the same things. If I see them [children] working, I am not the one that must always check the papers [a shared task]. Kids are better able to handle responsibility because of the variety of people, differentiated staffing-wise, they work with during the day. Discipline problems are nil in comparison to self-contained.

A concentrated effort was maintained by the staff to de-emphasize the importance of any given role within the school. Instead there was an emphasis on the importance of school unity. A reference to the school staff and students as "(a take-off on a popular television show)" made by students, staff, and parents was evidence of the effort to build and maintain that unity.

This low-key approach to specific roles made it extremely difficult for the interviewees to describe the various role positions maintained with their multiunit design. The principal was generally described within a general leadership framework highlighted by the sharing of most decisions. As put into words by an aide, "Authority is shared among several people, not just one like in self-contained." Cooperation was the principal's password for conducting the general operation of the school.

The principal responded to and initiated those tasks that were directed to her by persons higher in the hierarchy and those tasks that resulted from the planning efforts of the school's staff. There was, however, an implied decision function identified with the two leadership roles, the principal and the unit leader. A teacher said that "your leadership has to be able to step in when times get a little tight and say, 'Here is a better way of doing it; let's get on with it.'" Another said, "If units can't agree on something then the principal has to step in and make the decision before things get too far out of hand."

The unit leader role, in contrast to the principal role, was more descriptive in nature. Direct influence upon groupings of students, establishing disciplinary practices, setting conference formats, and determining general unit operations were identified ways in which the unit leader provided specific direction to the instructional program in each unit. This influence was balanced by placing many of the decisions concerning curriculum and instruction into ad hoc staff committees. Curricular planning, short and long range, was completed through ad hoc staff committees representative of the total school. Budgetary allocations for each ensuing school year were the responsibility of an ad hoc

committee. Again, these procedures emphasized the cooperative nature of the school's operational practices that made it very difficult to provide precise descriptions of roles and responsibilities specific to each of the staff positions.

The role of the teacher was described indirectly by relating it to other characteristics of the multiunit school, particularly teaming and shared decision making. The teacher was still the person identified as being responsible for the development and implementation of the instructional program. Distinguishing features of the teacher role centered on the increase in decision making and the many opportunities to develop peer relationships through teaming.

The aide position was also designed to accommodate individual differences. While the role was aimed primarily at direct involvement with children in an instructional setting, there was an array of aide tasks that were characteristics of specific aides. In general, the tasks focused upon conducting follow-up lessons where the instruction had been initiated by a teacher, conducting review and reinforcement activities, and serving as a resource to students working in small groups or independently. The variations among this role occurred within these general areas. One aide described her role by stating:

> Sometimes I just am allowed to do what I want. I do feel free to recommend, suggest; they do accept my judgment. I do appreciate it when my tasks are laid out for me.

An aide in another unit reported that she periodically assumed the responsibilities of an absent teacher instead of the unit calling for a substitute.

Why did aides become aides? This also varied. In response to this question, one aide replied that her reasons centered on the fact that her husband was a teacher and that their vacations were at the same time. She also said that she enjoyed children and that she had always been involved with her children as they grew up. After relaying these reasons, she paused and with a satisfied smile said, "Down deep, I've always wanted to be a teacher." Another aide started as a volunteer in response to a "help" message sent to all parents in her child's unit. Why? "I like kids," was the enthusiastic response.

Some concerns about the selection and use of aides were raised by the current PTA co-presidents, a husband and wife team. He raised the issue of selection procedures that reflected a district practice that permitted the employment of certified unemployed teachers as aides. He stated:

> By employing unemployed teachers as aides the district is buying qualified people for virtually nothing. This is good for the district but bad for the profession.

The practice of employing aides with school volunteer experience was also a concern related to the selection practices raised by the co-presidents. They said this was important because "some parents that were critical [of the program] volunteered just to see what the program was all about."

The other concern focused on the use of aides in an instructional setting. Interestingly, she stated that they had some concern about using aides in an instructional setting but had no reservation if other children (tutors) were leading the activity. He, however, countered,

"I'm not too concerned about how they learn as long as they are getting the right information."

Their feelings about what the aide's role should be were shown by relating an instance where one parent whose interest was in the study of bats made a presentation to some of the children at school. He concluded that example by saying, "That's what is needed, one shot deals. The trend would be more beneficial than the ways aides are now used." After a short pause he added, "Aides put their own values upon the kids."

Multiage Grouping of Students

Multiage grouping was extremely consistent throughout the total interviewing process. The interpretations of multiage grouping centered upon the combining of children of different ages for instructional purposes. It was a "dynamic process" used by teachers to shift kids up and down, according to one parent. This shifting permitted children to accelerate at their own pace. Any child might be in "fourth grade in one area, fifth grade in another, and in another area sixth grade." His comment made reference to specific grades while in the usual response the notion of grades was made by implication only. One parent described multiage grouping as "older kids with younger kids and vice versa." An aide described it much the same way: "A number of different age groups working together. Older with younger, younger with older." Another aide added an instructional dimension by explaining it as "kids working on different levels with different age levels within that group." "Children with different ages housed in the same area," was a more restrictive

description provided by a teacher. An interpretation provided by another teacher related multiage grouping to the education of the deaf child. She saw multiage grouping as an "integration mechanism." It made possible the inclusion of deaf children within the regular program for the normal hearing child.

These interpretations of multiage grouping were operationalized in various ways throughout School B. Each unit had children of different age levels, each of which encompassed at least two grade levels. In assigning children to each unit it was necessary to place some of the fourth-grade age students into Unit H and others into Unit I. All but twenty were assigned to Unit H, the other twenty being assigned to Unit I. Academic ability and student maturity were the two criteria used to determine the selection of the twenty children for Unit I. Although there was unanimous agreement among the members of the two Units as to what the two criteria were, there were differences placed upon their relative importance. Differences were not only between the two units but within the units as well. Several teachers stated that the primary consideration was academic ability while others stressed that the critical criterion was associated with social and emotional maturity. The principal stated that social criteria were the primary basis and that "academic consideration [was] not a real reason."

A teacher reported some parents had queried her about the reasons for the dividing of the fourth-grade children into two units. The previous year all of those children had been in one unit, a second-third grade unit. This year the fourth graders were either in a third-fourth

grade unit or in a fourth-fifth-sixth grade unit. Some of the parents of children in the third-fourth grade unit felt their children were being held back. The teacher reported that after she had explained the reasons to the parents it was no longer an issue.

In addition to the multiaged assignment of children to each of the units, multiage grouping occurred for homeroom assignment and for instructional groupings. These practices were characteristic of the regular education units as well as Unit K. The deaf children, especially in the mathematics area, were integrated into the mainstream of the units' regular instructional program. Unit K was also integrated in the sense that they did, on a need basis, work with the normal hearing students. Describing this process, the unit leader related that working with normal hearing children taught her a lot. She felt the practice "prevents [you] from being too narrow--too special educationalized." Other advantages were given to the practice of multiaging as well and certainly were not confined to Unit K.

Reactions to the multiaging practices at School B can be grouped into two categories. The first category characterized multiaging as a reflection of reality. It provided an environment reflective of the everyday conditions the children experienced. The second category extolled the improvement in the instructional programing for students. The practice permitted a variety of instructional options that facilitated the total growth of each child through an individualized philosophy and program.

The reflection of social reality reported to be enhanced by multiaging practices was described in many different ways. It assisted in the development of a "helping" attitude on the part of the children. While it might not eliminate social and behavioral labeling of children, i.e., the class clown, the school bully, and the real discipline problem, the labeling could be reduced through multiaging practices.

Social reality was also encouraged through multiage grouping by developing an appreciation of individual differences. Particular reference was given by the unit leader when describing the integration of deaf and normal hearing children:

> There is a place for the deaf education kids, socially and academically. Kids aren't put down. Sometimes the kids [normal hearing] may not always understand but they care about them [deaf children] as people.

It was also reported that multiage grouping gave children the experience of being the youngest and the oldest in a group. This experience promoted understanding of and communication with other individuals holding differing perceptions.

The instructional advantages associated with multiage grouping focused upon the ability to implement suggested IGE practices through the flexibility provided by multiage grouping of students. A frequently stated advantage referred to the elimination of academic labeling. A unit leader stated:

> It enables interaction between kids of different ages. If in the traditional setting, they [groups of children] would always be placed in a low group. They soon get the idea they are dumb and end up going through life as dumb. When multiaged and IGE'd, no single kid can or should be pigeon-holed as low, average, etc. Kids still ask but they are told that there are no such things.

This labeling of children was often referred to in a negative orientation. An aide's comment typifies the general response: "I don't like kids to know they are a failure. They will learn that soon enough; don't need to know [that] at age 8."

Although the school's implementation of multiaging practices was consistent with their descriptions of multiage grouping, one unit, Unit G, became very frustrated with both the concept and the practice. It was felt that the children in Unit G, primary children, were different, particularly the first graders. The staff teachers felt that these children needed to learn too much about school to be subjected to much movement and exposure to many different teachers and aides. They had to be socialized into the world of education. This socialization included providing each child with the security of one teacher. The unit leader stated:

> You have to isolate the first graders until they are familiar with school. Kids have and need to have the security of one teacher. They have to learn how to read directions and become more independent. Need more reassurance.

These feelings, according to the unit leader, reflected the thoughts of all the members of Unit K. An aide in Unit K expressed mixed feelings about multiage grouping:

> [Multiage grouping] is socially better. Working with others, helping; this is good. No stigma attached in grouping, high, low, etc. . . . . How do you really individualize that age group [primary]? . . . [they] can't take as much movement as others. Primary kids are different.

Nongradedness

A conscious effort was made to eliminate a graded concept at School B. This was done in discussion and in practice. Descriptions of nongradedness placed instruction as a common reference point. A teacher described nongradedness as a system where "children are grouped by age into units but grouped for instruction as to where he is at academically." Similarly, a parent described it as "children learn[ing] by needs, not by grade level." The absence of grades in the pupil reporting process was an additional dimension provided by one staff member.

Despite all effort to deemphasize references to grades and grade levels with staff, children, and parents, it appeared that the notion of gradedness still existed. "Kids still know" was the reaction expressed by many staff members. Several incidents were reported that illustrated the possible reasons for the difficulty in eliminating this and the efforts the staff had made toward reaching a nongraded environment. A parent described an incident illustrating the effort exerted by children:

> If someone on a tour [of School B], which is almost always conducted by a child, asks about grade levels, the kids sort of reprimand the person for even considering the grades are a part of the program [at School B].

One teacher reported that "we don't really know what grade level we are working in with each child. Kids can work at books at a grade level above or below." Similarly another felt that "it doesn't matter. Really don't consider it. More important to key in on specific objectives." An aide reported:

> Sarah [her daughter] knows what grade she is in. The right

> question should be what grade is Sarah in, in mathematics, reading, spelling, language arts, etc. Just to ask what grade they are in is not a fair question to ask a child.

District requirements seemed to present many of the difficulties in achieving nongradedness. A teacher outlined these as "district reports, tests, and grade level objectives." A unit leader illustrated how her unit has attempted to deal with this problem:

> Last year I had a battle with the science coordinator. He insisted that fourth graders couldn't learn about electricity. I told him that was ridiculous. We, in our unit, are now teaching science on a three year cycle. Each child, regardless of grade level, may learn about different aspects of the science topics and is not confined to grade level topics.

Teaming

Teaming was seen as a vehicle for achieving a variety of personal and instructional goals more than as an organizational arrangement of staff and children. Emphasis was given to the ability to meet student needs through the instructional process. In addition, individuals within the school setting were better able to deal with the attainment of personal goals and ambitions by participating as members of a team.

Operationally, each of the units was quite similar. Business was conducted from an agenda at each of the regularly scheduled unit meetings. The unit leader was responsible for the development of the agenda. Any team member might have an item placed on the agenda by simply making that request to the unit leader.

Unit meetings centered upon long- and short-range planning, assignment of extra-curricular responsibilities, parent-teacher conferences, discipline, children, grouping of students, general day-to-day operations, and any expected or unexpected changes that had to be made. The planning

practices were frequently highlighted when discussing the team. Each member of the team was identified as a resource person in one or more curricular areas. Each resource person assumed the leadership for the planning of his or her curricular area's instructional program. This planning responsibility entailed the development of objectives and the accompanying set of instructional activities designed to meet them. This plan, when complete, was brought before the unit for review and final approval. The finalized program was then implemented by the entire unit staff.

The planning practices of the team operations were identified as "resulting in better instruction because resources are utilized better," according to one teacher. The specific resources referred to her were detailed more specifically by others. A unit leader asserted that "leadership in one or two curricular areas promotes a better utilization of teacher time and energies." Time was also seen as a distinct advantage by a teacher. He stated, "I can spend my time planning in one area much better than if I had to plan everything." A unit leader highlighted the increase in the sharing of instructional materials and ideas by relating this practice to a condition she felt characterized the self-contained classroom. She stated:

> In self-contained, teachers are tight with materials because they don't want to have their books and ideas used before they get them [children from the previous grade] and have nothing to do.

The ability to form a variety of different instructional groupings was identified as an advantage of teaming. This made it possible to

match group and teacher characteristics more closely. In addition, the flexibility made it possible to prevent a teacher from being identified as a teacher of slow, fast, or average children, as well as preventing the groups of students from being identified as fast, slow, average, or remedial group.

The grouping and regrouping created by this flexibility also improved student evaluation. A unit leader saw the advantage in "[having] more than one teacher which will have worked with that child . . . thus making for a better evaluation."

This practice of matching teacher and student groups to improve individualized instruction also highlighted the need to consider teachers as individuals as well as students. A unit teacher described the importance of the individualization of teachers in relationship to individualized instruction and teaming. She stated:

> Individual teachers are individuals as well and should be treated as such. A team needs a balance of personalities, strict, loose, liberal, conservative, etc. You must believe in individualization before you can be a team in IGE. Then there is a place for all kinds of teachers on that team.

The implications of this belief were stated in several ways. A parent said, "One teacher may be able to get something out of a child that another teacher may not be able to do." Another felt that it was "good to expose kids to different personalities." In addition, another said:

> It affords that child access to more ideas and creativity. The staff gets to know each child better; reduces the opportunities for teachers to create negative attitudes about a child. You become a better teacher in the long run; you can't sluff off in your responsibilities. Sharing of responsibilities

[and] planning makes it easier to cope with problems. Creates more of a family structure.

Describing the specific advantage to the teaming arrangement utilized by the Special Unit, the unit leader stated:

> United we stand! Specials are often treated as second class teachers while regular academic teachers are first class. As a unit we can make music, art, p.e., important to kids and teachers and an important part of the regular program for kids. Our team is responsible for everything, discipline, planning activities, etc. We are autonomous. We do everything from deciding who, how, where, and when. This is different from the regular routine of the specialist where everything is decided and dicated to you by others. We have a voice in school . . . We get support here at School B. We can accomplish and implement our philosophy through IGE and the team. You can't do that in a self-contained school.

The assignment of an aide was used to illustrate how important it was for special area teachers to function as a team. At the start of the school year there was the equivalent of .5 unfilled staff positions. The IIC made the decision to employ an aide and that the aide would be assigned to the Special Unit. That, the unit leader claims, would never have happened unless the special area teachers operated as they were currently doing.

A similar feeling was expressed by members of Unit K, the unit responsible for the district's deaf education program. The unit leader stated:

> You team teach along with the regular unit. Treat the deaf kids like normal kids. When we integrate we participate in the planning but not always do we participate in the teaching. This is how I get to know what is going on in the units and I can see where we can integrate the kids. I sit in on the conferences and assist in making out the report cards. We are a team in math because all the deaf kids are integrated. The teaming has taught me a lot. Prevents me from being too narrow--too specialized.

Unit K represented a distinct departure from typical team operations characterizing the rest of the school, both operationally and attitudinally. The operation of the team seemed to be strongly influenced by their attitudes toward multiage grouping and the belief that primary children are different. The instructional program was characterized by minimal change for students and teachers. Because of their beliefs about the educational and social growth of primary children the instructional groups tended to be formed within grade levels. Children have language arts, handwriting, and spelling in the morning with one teacher and mathematics, social studies, and science in the afternoon with another teacher.

The unit leader characterized Unit G as "bitchy." When asked what elicited this type of behavior, she stated:

> . . . just too many things to do; too many extra meetings to go to, the Year Round School Committee, the Nature Center Committee, the Report Card Committee. Teaming also results in a waste of time by having to schedule, move kids, and loss of time waiting for others to finish up.

Another frustration expressed by the unit leader concerned the assignment of an aide to the Specials Unit. She felt that "aides should be with kids, not in the Specials Units copying sheet music." Although the unit leader experienced many frustrations, the ability to handle those frustrations was felt to be a distinct advantage in teaming. She stated:

> I can disagree and voice my disagreement without getting slapped down. I am better able to handle frustrations than in self-contained.

Shared Decision Making

Decision making occurred at two organizational levels, the Instructional Improvement Committee and the Instruction and Research Unit. The Instructional Improvement Committee's decisional realm concerned items that had school-wide implications for students and/or staff--"at least a major portion," according to the principal. Decision making at the Instructional and Research Unit level pivoted around the day-to-day operations of the instructional program.

The Instructional Improvement Committee worked from an agenda that was developed through staff input. Agenda items might be submitted by any staff member: principal, unit leader, or teacher. The principal was responsible for the agenda's development, printing, and distribution to the units prior to the IIC meeting.

The agenda became the vehicle by which staff could provide input to IIC decisions. A unit leader reported that her unit had a "specific time to go over the IIC agenda before the meeting so [they could] react to agenda items." The importance of each unit's discussion of IIC agenda items was emphasized by a teacher. She stated:

> Decisions made at the IIC are always made after input from the staff of each unit. Only trivial decisions are made by the IIC without input; like what day, Monday or Tuesday, should be the day for the safety programs.

Instructional decisions at the unit level were paramount in the conducting of day-to-day operations of the unit. A teacher stated:

> The most important decisions are made in the unit when we talk about time, scheduling, grouping and materials, learning style. The strong area is that we really communicate about kids.

Another teacher added that there were times when the team would "focus upon discipline and how to handle kids with problems." Another also added that "some nonsense decisions [were made] too, bus detail, lunch schedules."

The importance of participating in the decision-making process was highlighted by a teacher: "You feel better if you are involved in decisions that directly affect you." She then proceeded to describe a check in the decision process at the unit level. She stated, "If units can't agree on something then the principal has to step in and make the decisions before things get too far out of hand."

The use of ad hoc staff committees also created opportunities for staff participation in the decision-making process. An illustration is the development of the school's budget requests. The staff curriculum committee, made up of representatives from the Instructional and Research Units, assumed that responsibility. The availability of existing instructional materials in the school, requests from individual Instruction and Research Units, and financial constraints resulted in the final list of requested materials and supplies. The budget committee's requisition was limited to instructional materials and supplies because the school secretary was responsible for requisitioning materials that were routinely used by the staff, e.g., paper, pencils, chalk, and paint. According to the principal this not only resulted in a more efficient utilization of materials and resources but meant that "all units [were] more aware of what resources, materials, and supplies were available throughout the building."

In general, decisions were made by the IIC and the units with a variety of specific decisions delegated to staff ad hoc committees. The use of ad hoc committees was also extended to staff-parent committee make-up. A parent-staff committee was organized to keep the reporting system current. The implementation of a year-round school program at School B and the use of the nature center was also being considered through the use of ad hoc staff-parent committees.

Participation in decisions was not limited to the regular education teachers. A Unit K member stressed that they had "equal weight with all other teachers. [Everyone] participates in all decisions that are normal school activities."

The boundaries to which the decisions were confined appeared to be fuzzy. As related by a parent,

> If the decision making relative to instruction at the school gets too far out of line, the central administration would take that right away. [Although] officially, nor sure if they should.

The Instructional Programing Model at School B

Instructional Programing

The emphasis on educational accountability by the state and local school district provided assistance to the instructional programing effort at School B. The school district established district-wide objectives along with some related criterion-referenced tests. These objectives served as a guide for the development of the specific instructional activities within each unit.

Ad hoc curriculum committees composed of staff members from each of the various units took these objectives and organized them into a sequential arrangement in order to establish instructional continuity betweeen each of the units. Curriculum committee members were also the resource people in each unit and were responsible for planning the unit's instructional program in that curricular area.

The unit's approval of a curricular program was followed by preassessment. The preassessment items were often available through the district guides but, according to one teacher, "[might] by adapted to meet needs at our school." The results of the preassessment permitted the unit to form groups of children, assign teachers to the various groups, and begin the instructional activities. The instructional activities were the responsibility of each of the individual teachers. during this phase of the instructional process, further grouping was made if needed and possible in order to accommodate individual needs. This was at the teacher's option.

Postassessment followed instruction, with the general instructional process beginning anew--select new objectives, preassess, group for instruction, implement instructional activities, and postassess.

Similar instructional programing processes are characteristic of Unit K and the Specials Unit. Explaining the music program, the music teacher reported that each area within the music curriculum had been organized into a two-part, three-year cycle. One part consisted of a primary elementary focus; the other, an upper elementary focus. It took the student three years to obtain the total program in each cycle. The

activities within each cycle were not organized by grade levels but rather organized to permit the teachers flexibility in planning activities according to the needs of the students and the general sequential development of the program. She reported, "Better utilization of time for planning and teachers [results] because you aren't preparing different lessons for each class or for each grade level."

The IMC Director and member of the Specials Unit, reported the impact of the programing process from the perspective. She stated:

> The nature of instructional programing makes heavy use of instructional materials. At times, because of heavy usage, [it] makes it difficult for some units of study to occur at the same time in more than one unit.

The unit leader of Unit K described their instructional programing process as one in which "we preassess, then group and schedule. We do this the same way as done with normal kids."

Several specific improvements in the instructional program were cited. A unit leader: "Each teacher switches around so that no teacher can be identified as a teacher of the slow or low group." This same improvement was identified by another teacher but from a child's point of view. He stated:

> Kids know what group they are in; high, low. We try not to tell them but rather explain why they are in a particular group, but they know.

Continuous Progress

Descriptions of continuous progress usually contained two components, continuity and instruction. An aide described it as "continuity between and among units' instructional programs." A teacher emphasized

that the "need for continuity brings the units together." Providing a more specific instructional application, a unit leader stated, "Continuous progress takes him where he is and goes from that point. Groups are not based on grade level norms; better than self-contained." "It is the ability of the unit to pick up each student where ever they left off in an instructional program" was the description provided by a teacher. This, according to another, made it possible to integrate the deaf children so that they could "move them right along."

A personal incident was reported by an aide that illustrates that there was still a tendency, even though continuous progress was built into the instructional program, for parents to think of progress in terms of grade level promotion or demotion. She told of the instance where her daughter was moved from one unit to another after only one year. The change was made for both academic and social reasons. She said that after her daughter had been moved to another unit she promptly received many questions from her neighbors concerning the change because "they thought this was a promotion, like skipping a grade."

A parent provided another observation but in the other direction, failure. She stated:

> In the school the kids went to before, if you failed something, you flunked. Not here. This is good. It helps the students. It helps them to do better in junior high school when they are expected to be on their own.

Criterion-Referenced Assessment

The primary advantage of criterion-referenced assessment was associated with record-keeping: it provided the teacher with a means by

which to keep track of each student's instructional progress and was helpful when reporting pupil progress to parents. Associated with the record-keeping emphasis was the assistance criterion-referenced assessment provided in the general assessment practices of each unit. While assessment practices were specific to each unit the setting of specific criterion levels determining mastery were a unit option.

One unit leader reported that no hard-and-fast criterion levels were set for preassessment tests in Unit I; instead teacher judgment was more frequent. In contrast, the unit leader of Unit H reported that the Unit had set a three out of five criterion level for its preassessment. Enrichment activities were provided for those children in the Unit who passed all the preassessment tests for the selected instructional objectives. An aide described the integration of criteria levels with professional judgment in another unit. She stated:

> In math, twenty-seven out of thirty indicates that the student passes the objective; fail if below. The staff pulls those papers of the student that had twenty-five or twenty-six right. [They] look at the test and child; were they ill, out of school recently, etc., and then works with them and gives them another test. There is a pass-fail orientation to tests.

Preassessment

"Preassessment is a test that can be used to indicate where a child is" was the description of preassessment provided by a unit leader. Throughout the interviews the discussion of preassessment reflected this general response but also linked it with professional judgment. In the definitions these two elements were focused upon the formation of student placement in instructional groups. The principal stated:

> [Preassessment and professional judgment] result in more accurate grouping of students. It reduces the chance of a student being assigned to a group which will be learning something he already knows.

Although an aide felt she had "never been in a school that tested so much," the frequency of tests was seldom mentioned by either staff or parents. Few references were made to preassessment and its impact upon the children. One personal observation provided by a teacher sums up the general attitude toward the use and results of preassessment tests. She stated:

> When some kids come into your unit you have certain expectations but the preassessment really blows your mind.

Summary

In Chapter III the data were presented from both school sites used in this study. Principals, unit leaders, teachers, aides and parents reported on the practices associated with the characteristics of the multiunit school and the Instructional Programing Model. In Chapter IV, these responses will be analyzed in accordance with the conceptual framework and exploratory questions underlying this research.

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Technical Report No. 349 (Part 2 of 2 Parts)

AN EXPLORATORY CASE STUDY OF THE MULTIUNIT SCHOOL AND THE INSTRUCTIONAL PROGRAMING MODEL: POWER, RESOURCES, VALUES

by

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Report from the Project on Organization for Instruction and Administrative Arrangements

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ABSTRACT

The purpose of this study was to examine the interpretation of the characteristics of the multiunit school and the Instructional Programing Model as they related to home-school-community relations. The multiunit school is an organizational and administrative arrangement of staff and students that facilitates instructional programing for the individual student as well as other related Individually Guided Education practices. It consists of five underlying characteristics: multiage grouping of students, nongradedness, teaming, differentiated staffing, and shared decision making. The Instructional Programing Model is a cyclic seven step process used to plan, implement, and evaluate instructional programing for children. It has four underlying characteristics: instructional programing, continuous progress, criterion-referenced assessment, and preassessment.

Home-school-community relations was defined as the resolution of actual or potential conflict among various subpublics which may be associated with policy decisions or administrative practices which determine: (1) the use of scarce economic resources, (2) the value choices to be made regarding the educational program, and (3) the locus of power in the education enterprise.

Within this framework this study had two objectives:

1. To describe the characteristics of the multiunit school and the Instructional Programing Model.
2. To analyze the interrelationships between the characteristics identified in Objective 1 by identifying and describing each in terms of the allocation of (1) scarce economic resources, (2) educational values, and (3) power.

This case study was exploratory in design. Minimum criteria indicating an operational program of Individually Guided Education were used to select the two school sites used in this study. Data were collected through the use of in-depth interviews. An open-ended interview schedule was developed to obtain substantive data regarding the operationalization of the multiunit school and the Instructional Programing Model. Interviews were held with principals, unit leaders, teachers, aides, and parents. A data retrieval system, consisting of coded and notched key-sort cards, was devised to code and retrieve the data gathered during the interviews. Data were verified by two knowledgeable respondents from each of the two school sites.

Two general conclusions summarize the findings related to this study. First, the successful implementation and operationalization of the characteristics of the multiunit school and the Instructional Programing Model are related to the degree by which they can be translated into visible and tangible benefits easily interpreted by the various subpublics in the school community. In this study, it was found that two characteristics of the multiunit school, multiage grouping of students and teaming, had been translated into visible and tangible benefits. Consequently, the implementation of these two characteristics was more successful than those characteristics that were not capable of being translated into visible and tangible benefits.

Second, actual or potential conflict is more likely to result from differing educational values associated with the characteristics

than either their allocation of power or resources. The different values also hold the potential for conflict if issues arise in the school community.

CHAPTER IV

ANALYSIS OF THE DATA

Introduction

In Chapter III the data were presented that explicated the implementation of the multiunit school and the Instructional Programing Model. Each of the characteristics associated with the multiunit school and the Instructional Programing Model were discussed as they related to each of the two school sites.

In this chapter each characteristic of the multiunit school and the Instructional Programing Model is analyzed. Each characteristic is examined in terms of the following questions:

1. How is the characteristic operationalized in the school?
2. How is the characteristic defined by members of the school community?
3. What advantages and disadvantages are associated with the characteristic?
4. What allocations of power, resources, and values are associated with the characteristic?
5. Was conflict, created by the operationalization of the characteristic, associated with the allocations of power, resources, and values?

The Multiunit School

The multiunit school is the organizational and administrative arrangement of staff and students that facilitates instructional programing for the individual student as well as other related Individually

Guided Education practices. It consists of five distinguishing characteristics: multiage grouping of students, nongradedness, differentiated staffing, shared decision making, and teaming.

Multiage Grouping of Students

Multiage grouping occurred during the assignment of students to the Instruction and Research Units and during the formation of specific instructional groups. During their formation each Instruction and Research Unit was assigned students from two or more grade levels. In School A this resulted in three Instruction and Research Units with no overlapping grade levels. Consequently, all students in any given grade level were assigned to the same Instruction and Research Unit. In describing multiage grouping in this school the parents used the conventional split-grade, combination classroom, a practice frequently used in the age-graded, self-contained elementary school, as a common reference point. No reference to the split-grade, combination classroom was made at School B.

In School B the assignment of students to Instruction and Research Units followed the same pattern as in School A except that students in grades four, five, and six were assigned to different Instruction and Research Units. As a result, students in each grade level could be assigned to one of several Instruction and Research Units. Students in grades five and six were assigned to one of two Instruction and Research Units that housed all fifth and sixth graders. The majority of the fourth-grade students were assigned to an Instruction and Research Unit with all the third-grade students. The remaining fourth-grade students,

a total of twenty, were assigned to one of the Instruction and Research Units with fifth- and sixth-grade students. Social as well as academic considerations were used to determine which fourth-grade students would be assigned to the Instruction and Research Unit that housed the fifth- and sixth-grade students.

Multiage grouping was also described as being a characteristic of instructional groups. In both schools instructional groups were formed on the basis of instructional needs, but each school differed in describing its resulting multiage characteristic. In School B the multiage characteristic of instructional groups was described as "groups with students of different ages." In contrast, the description of the multiage characteristic of instructional groups in School A took on an achievement orientation, with multiage grouping being described as ability grouping, e.g., high third, low sixth.

Students and teachers were the primary recipients of the advantages ascribed to multiage grouping. For the students, multiage grouping fostered (1) social growth by creating conditions in which students of different ages could work and play together; (2) the opportunity for students to work in a variety of groups without facing the social peer pressures identified with an academic or personality label; and (3) the development of skills necessary to adapt to a variety of situations. For the teacher, multiage grouping improved the efficiency and quality of instructional grouping. Multiage grouping also provided a mechanism for "mainstreaming" special education students.

Disadvantages of multiage grouping were directed toward the primary age child. The primary student's need for security, a restricted environment, and a chance to become socialized into the world of education were reasons for citing disadvantages of multiage grouping at the primary level.

The values associated with multiage grouping were determined by identifying positive attributes ascribed to it by respondents having a positive and negative value orientation toward the characteristic. Table 6 presents a tabulation of the respondents' value orientations toward multiage grouping. The number of respondents having positive, neutral, or negative value orientations toward multiage grouping are listed in the respective columns.

Words and phrases used by the respondents when describing multiage grouping were used to identify their value orientations toward that characteristic. Respondents were placed into one of the three value orientation categories, positive, neutral, or negative. Respondents primarily using words and phrases that described multiage grouping in supportive terms were identified as having a positive value orientation toward the characteristic. Similarly, respondents using words and phrases that described multiage grouping in non-supportive terms were identified as having a negative value orientation toward the characteristic. Respondents who were either unaware of multiage grouping or who did not describe it in positive or negative terms were identified as having a neutral value orientation toward the characteristic. This process was also used to determine the value orientations of each respondent

TABLE 6

VALUE ORIENTATION OF RESPONDENTS TOWARD CHARACTERISTICS OF THE MULTIUNIT SCHOOL AND THE INSTRUCTIONAL PROGRAMING MODEL

Characteristic	Positive Value Orientation (N=41)	Neutral or Unaware of Characteristic (N=41)	Negative Value Orientation (N=41)
The Multiunit School			
Multiage Grouping	26	7	8
Nongradedness	12	22	7
Teaming	23	14	4
Differentiated Staffing	9	29	3
Shared Decision Making	6	34	1
The Instructional Programing Model			
Instructional Programing	5	32	4
Continuous Progress	6	33	2
Criterion-referenced Assessment	3	36	2
Preassessment	7	30	4

toward the other characteristics of the multiunit school and the Instructional Programing Model.

The data found in Table 6 show that 26 out of 41 respondents had a positive value orientation toward multiage grouping of students while only eight had a negative value orientation. Seven respondents were either unaware of multiage grouping or had neither a positive nor a negative value orientation to the characteristic.

The specific value attributes associated with multiage grouping of students are found in Table 7. This table presents the specific positive and negative attributes of multiage grouping. Each attribute is categorized according to its subpublic beneficiary. The total number of nominations for each attribute is also found in Table 7.

The data in Table 7 show that students were the primary recipients of the positive attributes associated with multiage grouping. In addition, the school staff was also accorded many benefits as a result of multiage grouping of students.

The three most frequently nominated positive attributes of multiage grouping provided benefits to students. Each of the positive attributes, (1) works with students of different ages, (2) reduces academic and social labeling, and (3) promotes social and emotional growth, received eight out of 26 possible nominations.

While "promotes social and emotional growth" was identified as one of the three most frequently nominated positive attributes, "inhibits social growth" was the most frequently nominated negative attribute. "Inhibits social growth" received four out of eight possible nominations.

TABLE 7

POSITIVE AND NEGATIVE VALUE ATTRIBUTES
OF MULTIAGE GROUPING OF STUDENTS

Positive Attributes	Number of Times Nominated
For the Student:	
Promotes social and emotional growth	8
Works with students of different ages	8
Reduces academic and social labeling	8
Easier to resolve teacher-student personality clashes	4
Develops tolerance and understanding of others	4
Experiences social reality	3
Comes in contact with a number of teachers	3
Promotes student modeling	1
For the School Staff:	
Accomodates changes	3
Better use of time, materials, and teacher expertise	2
Meet individual needs more effectively	1
More effective follow-through	1
More interesting	1
Can form better instructional groups	1

TABLE 7 -- Continued

Negative Attributes	Number of Times Nominated
For the Student:	
Inhibits social growth (primary = 3, upper = 1)	4
Children prohibited from getting security	1
Promotes academic and social labeling	1
For the School Staff:	
Lack of appropriate materials	1
Too hard to work in a multiage setting	1
Need for parents to know their child's grade level	1

There were no allocations of power or resources associated with multiage grouping of students.

One isolated instance of conflict related to the allocation of values associated with multiage grouping of students was identified. During the assignment of children to Instruction and Research Units in School B some of the fourth-grade students were assigned to an Instruction and Research Unit with all of the third-grade students; the others were assigned to an Instruction and Research Unit with fifth and sixth grade students. A few of the parents of children assigned to the Instruction and Research Unit with the third-grade students interpreted this placement to mean that their children were being held back while the other fourth-grade students were moved ahead. An explanation by a teacher giving the reasons for the placement and assuring them that their children were not being held back resolved the issue.

There are two types of conflict within the school community, actual and potential. The conflict discussed above was actual conflict resulting from differing values associated with multiage grouping of students as it related to the placement of students in an Instruction and Research Unit. Similarly, subpublics may have differing value orientations toward multiage grouping that may contain the potential for conflict.

Table 8 is a tabulation of the value orientations of principals, unit leaders, teachers, aides, and parents toward multiage grouping and the other characteristics of the multiunit school and the Instructional Programing Model. The numbers within each subpublic category indicate

TABLE 8

VALUE ORIENTATIONS OF SELECTED SUBPUBLICS TOWARD THE MULTIUNIT SCHOOL

Subpublics	Multiage Grouping			Nongradedness			Teaming			Differentiated Staffing			Shared Decision Making		
	+[a]	0[b]	-[c]	+	0	-	+	0	-	+	0	-	+	0	-
Principals (N=2)	1	1	0	0	1	1	0	2	0	1	1	0	0	2	0
Unit Leaders (N=10)	7	1	2	2	7	1	5	3	2	3	6	1	2	7	1
Teachers (N=11)	7	2	2	5	5	1	7	3	1	0	11	0	3	8	0
Aides (N=6)	3	2	1	2	3	1	2	4	0	3	3	0	0	6	0
Parents (N=12)	8	1	3	3	6	3	9	2	1	2	8	2	1	11	
Total Multiunit School	26	7	8	12	22	7	23	14	4	9	29	3	6	34	
	+	0	-	+	0	-	+	0	-	+	0	-	+	0	-

[a]Positive Value Orientation

[b]Neutral or Not Aware of Characteristic

[c]Negative Value Orientation

the number of respondents identified as having either a positive, neutral, or negative value orientation. The value orientations of each subpublic are given for each of the characteristics.

The data in Table 8 indicate that all of the subpublics were supportive of multiage grouping of students. There were only eight individuals who had a negative value orientation toward multiage grouping and seven who were either unaware of the characteristic or neutral in their value orientation.

A word of caution must be made concerning the data in Table 8. With the exploratory design of this study only a limited number of respondents were selected from each of the two school sites. As a result the data in Table 8 is to be regarded as only suggestive of possible patterns of subpublic orientations.

Nongradedness

Parental expectations characterized the degree to which nongradedness was operationalized at School A. Parental expectations for School A required grade level designations in the school's instructional activities and grade level comparisons in its evaluative processes. These expectations carried over into their interpretation of nongradedness; nongradedness being described as students of different grade levels working together in the same group. In response to those expectations the school's instructional and evaluative activities were permeated with references to grade levels. Thus nongradedness, as defined in this research, was not implemented in School A.

Nongradedness at School B was implemented by eliminating the grade level designations when assigning students to each of the Instruction and Research Units. However, grade levels were used by the staff as the primary basis for forming the Instruction and Research Units. Grade level comparisons were given less emphasis when reporting pupil progress, primarily through the use of nongraded reporting system developed by a joint staff-parent committee.

Despite the nongraded practices at School B and staff support of nongradedness, most staff members knew the grade levels of the children they worked with and the parents knew the grade levels of their children.

While support for nongradedness in School B was high, few specific advantages were associated with it. For the student, nongradedness created improved learning conditions, the student being more challenged but less frustrated. For the teacher, nongradedness made it easier to accommodate different student personalities and instructional needs when planning for instructional activities.

Although there were no specific disadvantages associated with nongradedness, there were conditions identified which inhibited nongraded practices. They were (1) the long-standing tradition of gradedness, (2) the parental demands for grade level comparisons, and (3) local and state reports requiring graded information.

Table 6 shows that 12 respondents had a positive value orientation toward nongradedness while seven had a negative value orientation toward the characteristic. There were 22 respondents who were either unaware of nongradedness or were neutral in their value orientation.

Table 9 shows the specific positive and negative attributes ascribed to nongradedness. Students were the primary recipients of the benefits of the positive attributes. "Promotes learning by needs" was the primary benefit for students. It received nine out of 12 possible nominations. Only one positive staff benefit was identified.

The school staff was the primary recipient of the negative attributes associated with nongradedness. Support for each of the negative attributes was minimal with each of the five attirubtes receiving only one nomination.

There were no power and resource allocations associated with nongradedness. Conflict related to nongradedness was also absent.

Teaming

Other than being defined as a group of people working together, teaming was described in operational terms. Teaming occurred within the Instruction and Research Unit. School A referred to Instruction and Research Units as teams as a result of implementing team teaching prior to the implementation of Individually Guided Education. Early dismissal of students once each week provided time for weekly Instruction and Research Unit meetings.

In describing the team three functional areas were identified: planning, teaching, and evaluation. Planning and evaluation activities formed the basis for most of the meeting discussions. While some planning activities were related to long-range and short-range curriculum plans, the weekly and daily planning activities constituted the majority of the planning activities. Evaluation was student oriented. Team

TABLE 9

POSITIVE AND NEGATIVE VALUE ATTRIBUTES
OF NONGRADEDNESS

Positive Attributes	Number of Times Nominated
For the Student:	
Promotes learning by needs	9
Eliminates stigma when students move between groups	2
Promotes social growth	1
Children are less frustrated	1
"Just good"	1
For the School Staff:	
Better utilization of time and teachers	1
Negative Attributes	
For the Student:	
Creates confusion	2
For the School Staff:	
More work for the teacher	1
"Just won't work"	1
Your have to grade for the basic subjects	1
Too many report require graded information	1
Lack of materials	1
For the Parent:	
Need to know the student's grade level	1

members discussed children in an evaluative sense in the process of forming groups and when reporting pupil progress.

Teaching, the third functional area of team activities, occurred as a result of the plans developed during the Instruction and Research Unit meetings. The general plans that were established at these meetings provided the overall parameters of the instructional program. Within these parameters teachers devised specific instructional activities to meet the needs of the students.

Many advantages were associated with teaming. Parents described advantages for the teacher and the student. For the teacher, teaming increased teacher competency as a result of working with other teachers and by sharing ideas, materials, and talent. For the student, teaming provided an opportunity to mature as a result of being able to work with many different adults. Flexibility in grouping also made it easier to form groups that reduced teacher-pupil clashes.

Aides, most of whom were also parents, identified the same advantages as the non-aide parents but placed a greater emphasis on the student benefits.

The efficient use of human and material resources was the major advantage identified by teachers. Teaming resulted in more sharing of materials and ideas among staff members. The efficient use of time, materials, and teacher talents was also associated with the team's planning efforts.

Unit leaders associated operational advantages with teaming. Teaming increased the utilization of human and material resources through

coordinated planning efforts. Because teaming also resulted in more than one teacher working with each student, unit leaders indicated that this prevented one teacher from having the ability to assign an academic or social "label" to a student.

The ability to gain staff acceptance as a professional equal was the major advantage of teaming described by teachers and unit leaders in the "special" team, a team composed of teaching specialists. Their integrated planning and teaching efforts with other Instruction and Research Units enabled them to participate fully in all school activities and decisions. Professional growth was also an advantage of teaming, particularly with the "special" educators. Their interaction with regular education during joint planning and teacher activities permitted the extension of their educational experiences beyond the parameters of their specialty area.

Disadvantages associated with teaming focused upon the loss of teacher independence, the additional work load, and the danger of interpersonal conflict among staff members.

Data from Table 6 show that 23 respondents had a positive value orientation towards teaming while only four had a negative value orientation. Fourteen respondents were either unaware of teaming or had a neutral value orientation.

Table 10 shows the specific positive and negative value attributes associated with teaming. The data show that the school staff is the primary recipient of the positive attributes of teaming. The student is also a recipient of positive attributes associated with teaming.

TABLE 10

POSITIVE AND NEGATIVE VALUE ATTRIBUTES OF TEAMING

Positive Attributes	Number of Times Nominated
For the Student:	
More than one teacher evaluating each student	5
Match student and teacher personalities	4
Develops a closer pupil-teacher relationship	2
Develops self-concept	1
Student works with more than one teacher	1
For the School Staff:	
Teachers work with different types of groups	6
Generates ideas and enthusiasm	4
Promotes sharing of ideas, materials and teacher talent	4
Encourages professional dialogue and growth	4
Treats teachers as individuals	3
Prevents "special teacher" from being too specialized	3
Maintains peak performance	2
Improves planning	
Develops flexibility	2
Creates family group	2
Encourages rapport between teachers and aides	2
Keeps teachers on task	1
More people to help	1
Helps mainstreaming	1
Easier than in a self-contained classroom	1

TABLE 10 -- Continued

POSITIVE AND NEGATIVE VALUE ATTRIBUTES OF TEAMING

Negative Attributes	Number of Times Nominated
For the Student:	
Restricts student from having only on teacher	1
For the School Staff:	
Harder than self-contained classroom	3
Restricts teacher freedom	2
Promotes the formation of cliques and interpersonal conflict	2
Too many meetings	2
Can't provide adequate feedback to students	1
Planning time takes time away from students	1

The four most frequently nominated positive attributes for the school staff are: (1) teachers work with different types of groups, six out of 23 nominations; (2) generates ideas and enthusiasm, four out of 23 nominations; (3) promotes sharing of ideas, materials, and teacher talent, four out of 23 nominations; and (4) encourages professional dialogue and growth, four out of 23 nominations.

The two most frequently nominated positive attributes for students were: (1) more than one teacher evaluating each student, five out of 23 nominations; and (2) match student and teacher personalities, four out of 23 nominations.

Teaming had negative attributes for the school staff. "Harder than the self-contained classroom" was the most frequent negative attribute. This attribute received three out of the four possible nominations. An increase in work load and the potential for interpersonal conflict were the other two negative attributes associated with teaming. Each received two out of the four possible nominations.

Allocations of power were attributed to teaming in several ways. The use of an agenda at the Instructional Improvement Committee meeting was a device frequently mentioned by which the team could influence decisions at the organizational level. The agenda was developed through staff input. Any individual or Instruction and Research Unit could place specific items on the agenda. The agenda for each meeting, particularly in School B, was distributed prior to the Instructional Improvement Committee meeting so that the Instruction and Research Unit members, the team, could react. The team input was used by the unit leader to assist in the decision-making process at the schoolwide level.

Power associated with teaming was also discussed at the classroom level. Decisions relating to the implementation of the school's instructional program were a responsibility of the Instruction and Research Unit. In addition, the general operations of the Instruction and Research Unit were determined by team decisions. As a result, each individual, being a member of the team, could participate directly in the decision-making process at the classroom level.

Resource allocations were also identified in relationship to teaming. The use of existing, scarce economic resources used for instruction materials and supplies was based upon decisions made by the team, both at the school and classroom levels. The allocation process began with each Instruction and Research Unit, or a committee representing each of the Instruction and Research Units, drafting the initial budget requests. The Instructional Improvement Committee coordinated these requests in order to eliminate the duplication of materials and to stay within budgetary constraints.

A more efficient use of existing, scarce economic resources was reported to have resulted from this allocation process. The requests developed through team decision making reduced the duplication of materials and supplies at the classroom and the school levels. The sharing of instructional materials and supplies within and between Instruction and Research Units increased their availability and usage.

Conflict associated with teaming occurred at School B. Perceptions of student needs and capabilities served to focus attention upon the value of teaching teams. In School B the primary Instruction and

Research Unit was composed of staff members who believed that primary students were different from other students and could not be moved about because of their need for security and educational socialization. These expectations resulted in an instructional program that was subject to criticism by the other staff members.

The necessity of working as a team was part of that conflict. Because there was little movement of students and teachers in their instructional program, the primary staff regarded teaming as a waste of time. This time was lost when the team met to develop schedules for the weekly and daily activities. Time was also wasted when teachers had to wait for other teachers to finish their assigned activities, a disadvantage they associated with working as a team.

Differentiated Staffing

Differentiated staffing encompassed four roles: principal, teacher, unit leader, and aide. There were no formal job descriptions delineating specific role responsibilities. The integration of the differentiated roles was aided by two other components of the multiunit school: teaming and shared decision making. Also facilitating the integration of the differentiated staffing pattern was the establishment of the regularly scheduled Instructional Improvement Committee and Instruction and Research Unit meetings. The Instructional Improvement Committee was held within the school day at a time when all Instructional Improvement Committee members could meet. Early student dismissal one afternoon each week provided time for Instruction and Research Unit meetings.

The principal role was described as that of providing a facilitative function. In the performance of that function the principal served as a resource to the staff. The parents within the school community of School B were the only subpublic to outline an instructional leadership function to the principal role. They described the role as one in which the principal maintained direct control over the instructional program by being the individual who determined the instructional program and related curriculum. This may in part have been a function of the administration style of the previous principal; the current principal had assumed the principalship only five weeks prior to this research.

The teacher role was described as being responsible for planning and conducting instructional activities. The primary change associated with this role focused upon the environment in which a teacher works. These changes increased participation in decision making and the opportunities for professional interaction. These two changes are also associated with two other characteristics of the multiunit school, shared decision making and teaming.

The unit leader is the new role in the differentiated staffing pattern. Three functional areas were used to describe this role: leadership, coordination, and liaison. The leadership function was described as providing direction to the unit. The coordination function was fulfilled by synchronizing the activities of the Instruction and Research Unit to maintain an efficient work operation. The liaison function was fulfilled through participation in Instructional Improvement Committee. This liaison function not only linked the principal with the staff but served to

link the Instruction and Research Units together to provide a schoolwide focus.

Differences were noted in describing the unit leader role. Parents emphasized the coordination. Staff emphasized all three areas. Unit leaders identified coordination and liaison as components of that role but did not describe a leadership function. Only one parent identified teaching as a component of the unit leader role.

The aide was described as fulfilling an instructional and clerical function. Identified as a key role in the differentiated staffing pattern, the aide participated in Instruction and Research Unit meetings, made suggestions to staff members, and performed tasks related to instructional and clerical duties. In both schools aides were used at times to assume the responsibilities of an absent teacher instead of calling a substitute. These aides were often certified teachers.

Advantages associated with differentiated staffing were identified as benefits for students and teachers. Student maturity was enhanced because students had an opportunity to work with a variety of different types of individuals, professional and nonprofessional. Benefits for the teacher resulted from an increase in the time they could spend with students. Only one isolated disadvantage was associated with the differentiated staffing; the unit leader spent too much of the time away from children.

The data found in Table 6 show that nine out of 41 respondents had a positive value orientation toward differentiated staffing while three respondents had a negative value orientation. Twenty-nine respondents were either unaware of differentiated staffing or had neither a

positive nor a negative value orientation toward the characteristic.

The specific value attributes associated with differentiated staffing are found in Table 11. The student is the primary beneficiary of the positive attributes associated with differentiated staffing. "Children work with a variety of different people" was the positive attribute providing benefits for students. This attribute received six out of nine possible nominations.

Negative attributes associated with differentiated staffing were directed toward the school staff. "The improper use of aides" was the primary negative attribute; it received three out of three possible nominations. There were no negative attributes associated with differentiated staffing directed toward students.

Power was associated with differentiated staffing through the descriptions of the various roles and responsibilities. The unit leader was described as a key figure in terms of power. The unit leader was the only role that allowed formal access to both the decision-making processes in the Instruction and Research Unit and in the Instructional Improvement Committee. In addition, the unit leader role, in being ascribed a liaison function, was a direct link in the communications chain between the staff and principal and between each of the various Instruction and Research Units.

Each school gave the unit leader role a different degree of formal power. In School A the unit leader had the ability to make unilateral decisions about student placement, unit operations, and the use of aides. In addition, all requests were channeled through the unit leader. In

TABLE 11

POSITIVE AND NEGATIVE VALUE ATTRIBUTES
OF DIFFERENTIATED STAFFING

Postive Attributes	Number of Times Nominated
For the Student:	
Children work with a variety of different people	6
For the School Staff:	
Necessary to individualize	2
Promotes closeness between staff members	1
Enables participation in decision making	1
Negative Attributes	
For the School Staff:	
Improper use of aides	3
Creates too much paper work	1

School B most decisions were made through group decision processes. There was less emphasis on highlighting the importance of any one given role in the differentiated staffing pattern.

Access to the system is an important component of power. Within the differentiated staffing arrangement of the multiunit school the role of the aide was described as a means by which community members could gain access to the school. In School B all aides who were interviewed reported that they became aides in order to find out what was happening in the school. While the aides in School B did not report this as a reason for becoming an aide, other parents reported that there were volunteers who wanted to find out what was happening in the school and used the school's volunteer program to gain access to the school.

There were no resource allocations associated with differentiated staffing. Actual conflict was not identified in relationship to this characteristic. The potential for conflict, however, may exist with respect to the various subpublic value orientations toward differentiated staffing. Table 8 shows that a varying number of principals, unit leaders, aides, and parents had positive value orientations toward differentiated staffing. All teachers had either a neutral value orientation toward differentiated staffing or were unaware of the characteristic.

Shared Decision Making

The locus of formal decision making occurred within the Instructional Improvement Committee and the Instruction and Research Unit. Each of these two organizational components had specific decisional domains

and operating procedures. Within this framework the decision process enabled the school to develop and implement its instructional program.

The Instructional Improvement Committee was composed of the building principal and the unit leader from each of the Instruction and Research Units. Meeting times were scheduled during the school day and held on a regular basis. School A had not set a specific meeting time but had plans to do so. An agenda was used to establish meeting topics. The agenda items were solicited from unit leaders, staff members, and the principal. The principal assumed the responsibility for publishing the agenda and having it distributed prior to the meeting. In School B the Instructional Improvement Committee agenda was distributed prior to the Instruction and Research Unit meeting so that unit members could react to the agenda items. This enabled the unit leaders to get teachers' input prior to making any decision at the Instructional Improvement Committee meeting.

The decision focus at the Instructional Improvement Committee was on schoolwide concerns. This included operational and instructional items. In School A, where regular Instructional Improvement Committee meetings were not held, the instructional programs were determined at the Instruction and Research Unit level. This, according to School A staff members, was the reason that the school's instructional program did not have a schoolwide focus.

Some of the decisions that were the responsibility of the Instructional Improvement Committee were delegated to ad hoc committees. Ad hoc staff committees were usually formed if the task was focused upon

internal school matters--e.g., to order instructional supplies and materials for the coming school year. Ad hoc staff-parent committees were formed when the focus had implications beyond the internal operations of the school--e.g., to develop the school's conference and reporting system.

The Instruction and Research Unit meeting involved teachers, aides, and a unit leader. The meeting, held at least once each week during a time when students were dismissed early, usually worked from an agenda that was developed by the unit leader. Staff members could request that items be placed on the agenda. The focus of the decisions made at this level were related to the operations of the unit as they applied to the implementation of instructional activities. This included scheduling of students and staff, grouping of children, student evaluation, and general operational mechanics, e.g., lunch schedules and recess times.

Decisions were made by a majority vote. In some Instruction and Research Units aides participated in the decision process but did not have voting power. In other units the aides did not participate at all unless requested.

The overall parameters of the decision process were bound by local and state laws and guidelines. There was also an implicit veto power maintained by the principal on all decisions made either by the Instruction and Research Unit or at the Instructional Improvement Committee. No references were made as to the actual exercise of that veto power.

Staff members could not describe any specific advantages to shared decision making other than a general "It feels good to make decisions about things that affect you" response. No references were made to any

disadvantages of shared decision making. Parents were unaware of any of the decision processes in the school.

Values associated with shared decision making are found in Table 6. The data found in Table 6 show that six out of 41 respondents had a positive value orientation toward shared decision making while only one respondent had a negative value orientation. Thirty-four respondents were either unaware of shared decision making or had a neutral value orientation toward the characteristic.

The specific value attributes associated with shared decision making are found in Table 12. Five out of the six possible respondents with a positive value orientation identified "Makes decisions that affect you" as a positive attribute of shared decision making. "Involved in too many decisions" was the only negative attribute associated with shared decision making and received only one nomination.

Allocations of power associated with shared decision making were identified in relationship to the specific decision domains of the Instructional Improvement Committee and the Instruction and Research Unit. In each case, individuals were responsible for making decisions that directly affected their immediate work environment. Connotations of power relative to decision making were usually associated with teaming and not with shared decision making.

Table 8 indicates that the only school staff members who had a positive value orientation toward shared decision making were teachers and unit leaders. Table 8 also shows that only one parent had a positive value orientation toward shared decision making. The remaining eleven

TABLE 12

POSITIVE AND NEGATIVE VALUE ATTRIBUTES OF SHARED DECISION MAKING

Positive Attributes	Number of Times Nominated
For the School Staff:	
Makes decisions that affect you	5
Encourages close staff relationships and interaction	1
Negative Attributes	
For the School Staff:	
Involved in too many decisions	1

parents were either unaware of the characteristic or had a neutral value orientation.

There were no allocations of resources associated with shared decision making. There were no references to any conflict associated with shared decision making.

The Instructional Programing Model

The Instructional Programing Model is a cyclic seven-step process used to plan, implement, and evaluate instructional programs for children. This process takes into account each student's beginning level of performance, rate of progress, style of learning, and other learning characteristics appropriate for the school's instructional program. It consists of four distinguishing characteristics: instructional programing, continuous progress, criterion-referenced assessment and preassessment.

Instructional Programing

The instructional programing process began in both schools with the establishment of school wide continuums based upon district curriculum guides. In School B the Instructional Improvement Committee established an ad hoc staff committee composed of staff members from each Instruction and Research Unit to organize them into a sequential arrangement in order to establish instructional continuity between the units. In School A it was a decision of each Instruction and Research Unit to pick and choose the appropriate objectives upon which to base its instructional program.

Preassessment followed the establishment of objectives. In School A achievement and ability tests were used and in School B criterion-

referenced tests were employed. Both schools also used past performance and teacher judgment in the preassessment process. The preassessment results were used to assist in determining student objectives and instructional groups.

Instruction followed the grouping process, each teacher being assigned a group of children. Instruction was followed by postassessment. The completion of the postassessment signaled a recycling of the process by setting new objectives and forming appropriate groups.

Improves student grouping, promotes team planning, and minimizes the labeling of groups as fast, average, and slow were advantages identified with instructional programing. The advantages associated with instructional programing are related to the outcome of the process and not with the process itself.

Likewise, the disadvantages were also related to the outcomes of the instructional programing process. With the exception of too much testing (this will be discussed in a later section) the disadvantages were instructionally oriented. There was too much independent work, not enough individual attention, and the movement prevented children from getting to know each other.

The data in Table 6 show that five out of 41 respondents had a positive value orientation toward instructional programing and four respondents had a negative value orientation. Thirty-two out of the forty-one respondents were either unaware of instructional programing or had neither a negative nor a positive value orientation.

The specific value attributes associated with instructional programing are found in Table 13. The data in Table 13 show that the school

TABLE 13

POSITIVE AND NEGATIVE VALUE ATTRIBUTES OF INSTRUCTIONAL PROGRAMING

Postive Attributes	Number of Times Nominated
For the School Staff:	
Easier to form new instructional groups	3
Encourages better planning of instruction	2
Possible to integrate special education students	1
Brings people together	1
Negative Attributes	
For the Student:	
Causes too much movement between classes and teachers	1
Too much independent work and not enough individual attention	1
Difficult for children to make friends	1
For the School Staff:	
Tests are misleading	1

staff was the primary recipient of the positive attributes associated with instructional programing. The two most frequently nominated attributes were "Easier to form new instructional groups" and "Encourages better planning of instruction." These attributes received three and two nominations respectively.

The most frequently nominated negative attribute was "Tests are misleading." This attribute received two out of the four possible nominations and was the only negative attribute directed toward the school staff. Students were the recipients of three negative attributes each receiving one nomination.

There were no allocations of power or resources associated with instructional programing.

There were no conflicts identified with instructional programing. Table 14 shows that there were differing subpublic value orientations toward instructional programing. The negative value orientations toward instructional programing were confined to a parental subpublic, all of whom had children in School A. Positive value orientations were identified by two parents, two teachers, and one unit leader. Thirty-two of the 41 respondents were either unaware of instructional programing or had a neutral value orientation. These differing value orientations or lack of knowledge could be the basis for potential conflict.

Continuous Progress

Continuous progress was defined at School B as the placement of students in an instructional group based on instructional needs. Progress through the various curricula was based on students' needs irrespective

TABLE 14

VALUE ORIENTATIONS OF SELECTED SUBPUBLICS TOWARD THE INSTRUCTIONAL PROGRAMING MODEL

	Instructional Programing			Continuous Progress			Criterion-Referenced Assessment			Preassessment		
	+[a]	0[b]	-[c]	+	0	-	+	0	-	+	0	-
Principals (N=2)	0	2	0	0	2	0	0	2	0	1	1	0
Unit Leaders (N=10)	1	10	0	3	7	0	1	9	0	1	9	0
Teachers (N=11)	2	9	0	2	9	0	2	8	1	4	6	1
Aides (N=6)	0	6	0	0	5	1	0	5	1	0	5	1
Parents (N=12)	2	6	4	1	10	1	0	12	0	1	9	2
Total Instructional Programing Model	5	32	4	6	33	2	3	36	2	7	30	4
	+	0	-	+	0	-	+	0	-	+	0	-

[a] Positive Value Orientation

[b] Neutral or Not Aware of Characteristic

[c] Negative Value Orientation

of years in school. The establishment of schoolwide objectives provided the basis for continuous progress.

Continuous progress in School A was not implemented. The few interpretations that could be isolated identified continuous progress as the placement of students into groups by grade level or ability. The individuals who could relate to continuous progress said it was the same as nongradedness.

Advantages associated with continuous progress were identified by teachers. Continuous progress reduced the "pass/flunk" connotation of student growth. In addition, the continuity associated with continuous progress brought the staff together to maintain a schoolwide focus. The data in Table 6 show that there were six respondents with a positive value orientation toward continuous progress while there were two respondents with a negative value orientation. Thirty-three respondents were either unaware of continuous progress or had a neutral value orientation toward the characteristic.

The data in Table 15 show the specific value attributes associated with continuous progress. The two most frequently nominated attributes provided benefits for students. "Eliminates the fear of flunking" and "students grouped by instructional needs" each received two nominations.

The negative attributes were directed toward students. The two negative value attributes, "creates confusion" and "pushes students through instructional materials without appropriate instruction," each received one nomination.

There were no allocations of power and resources associated with

TABLE 15

POSITIVE AND NEGATIVE VALUE ATTRIBUTES
OF CONTINUOUS PROGRESS

Positive Attributes	Number of Times Nominated
For the Student:	
Eliminates the fear of "flunking"	2
Students can be grouped by instructional needs	2
Challenges the students	1
Possible to integrate special education students	1
For the School Staff:	
Brings the Instruction and Research Units together	1
Negative Attributes	
For the Student:	
Creates confusion	1
Pushes student through instructional materials without appropriate instruction	1

continuous progress. Conflict associated with continuous progress was also not identified.

Criterion-referenced Assessment

Criterion-referenced assessment was described in both schools as setting a standard against which to determine student progress. Although defined in each school the use of criterion-referenced practices was limited to School B. Criterion-referenced assessment in School B was used to assist staff in the overall assessment activities. Each Instruction and Research Unit was responsible for setting the specific criterion levels. Criterion-referenced assessment was used in both pre- and postassessment activities.

Criterion-referenced assessment was also used in record-keeping. School B used the results of criterion-referenced assessment as a means of keeping track of student progress. The results were also used to assist teachers in reporting pupil progress. The practices associated with criterion-referenced assessment in School B also related to its identified advantages, keeping track of student progress and identifying student needs.

Resistance to the use of criterion-referenced assessment in School A was associated with the staff's perception of community norms. These norms required student progress to be measured in grade level terms. In accommodating these expectations grade level standards were used throughout the instructional program. Disadvantages associated with criterion-referenced assessment were limited to School A. These focused upon the test's inability to measure student potential and to make grade level

comparisons.

Data in Table 6 indicate that three out of the possible 41 respondents were identified as having a positive value orientation toward criterion-referenced assessment and that two respondents were identified as having a negative value orientation toward the characteristic. There were 36 respondents who were either unaware of criterion-referenced assessment or had a neutral value orientation.

The data in Table 16 show that the school staff was identified as the recipient of the positive attributes associated with criterion-referenced assessment. "Identification of student needs" was the most frequently nominated positive attitude.

The negative attributes were directed toward the school staff and the parent. For the school staff, "Test scores can't measure student potential" was a negative attribute associated with criterion-referenced assessment. For the parent, "Can't make grade level comparisons" was a negative attribute. Each of the negative attributes received one nomination.

There were no allocations of power and resources associated with criterion-referenced assessment. There were also no reported conflicts associated with this characteristic.

Preassessment

Preassessment was described as the use of a test to determine where a student should be grouped for instructional purposes. The selection of specific preassessment devices was determined by the Instruction and Research Unit. A variety of devices were used. These included com-

TABLE 16

POSITIVE AND NEGATIVE VALUE ATTRIBUTES
OF CRITERION-REFERENCED ASSESSMENT

Positive Attributes	Number of Times Nominated
For the School Staff:	
Identifies individual student needs	2
Assists in reporting progress to parents	1
Keeps tract of pupil progress	1
Negative Attributes	
For the School Staff:	
Test scores can't measure student potential	1
For the Parent:	
Can't make grade level comparisons	1

merical and teacher-made tests as well as assessment devices available from district curriculum offices.

The use of preassessment varied with the particular Instruction and Research Unit. In most cases, in both School A and School B, prey assessment was subject to sound professional judgment. The preassessment served to provide assistance to the grouping processes related to student placement. In no instance was the placement of students based solely on the preassessment results.

The one advantage associated with preassessment was that it resulted in a more accurate grouping of students. It prevented duplication of instructional activities or a student from being assigned to a group that was learning something he or she already knew. Although not identified as a disadvantage, the frequency of tests was a concern of parents in School A. They felt that their children were overtested. Parents could not identify specific reasons other than their "children were being tested too much."

Data in Table 6 show that seven out of 41 possible respondents were identified as having a positive value orientation toward preassessment while four were identified as having a negative value orientation. There were 30 respondents who were either unaware of preassessment or had a neutral value orientation toward the characteristic.

The data in Table 17 show the specific positive and negative value attributes associated with preassessment. The two most frequently nominated positive value attributes of preassessment provided benefits for the school staff. "Identifies student needs" and "results in accurate grouping" were the two positive value attributes and each received three

TABLE 17

POSITIVE AND NEGATIVE VALUE ATTRIBUTES OF PREASSESSMENT

Positive Attributes	Number of Times Nominated
For the Student:	
Eliminates a student from being placed into a group in which he or she already knows what is being taught	2
For the School Staff:	
Identifies student needs	3
Results in accurate grouping	3
Helps new teachers	1
Negative Attributes	
For the Student:	
Too many tests	3
For the School Staff:	
Tests are too specific	1
Tests are invalid	1

out of seven possible nominations. The placement of students into proper groups provided the focus for the one positive attribute providing benefits for students.

From the four respondents identified as having a negative value orientation toward preassessment, "Too many tests" was the most frequently nominated negative value attribute; it received three nominations.

There were neither any allocations of power and resources nor any conflicts identified that were associated with preassessment.

Summary

In this chapter the data were analyzed by answering the exploratory questions used in this study. Each of the characteristics of the multiunit school and the Instructional Programing Model was described in terms of its definitions and operational characteristics. Advantages and disadvantages associated with each of the characteristics were identified. The allocations of values, economic resources, and power associated with the characteristics were described. Finally, conflicts resulting from the allocations of power, resources, and values as they related to the implementation of the characteristics of the multiunit school and the Instructional Programing Model were described. In the succeeding chapter a summary of this study, its conclusions, and implications are presented.

CHAPTER V

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

This section presents a brief summary of the study and its conclusions. This is followed by a discussion of the implications resulting from the results of this study.

Summary

The purpose of this study was to examine the interpretation of the characteristics of the multiunit school and the Instructional Programing Model as they related to home-school-community relations. The multiunit school is an organizational and administrative arrangement of staff and students that facilitates instructional programing for the individual student as well as other related Individually Guided Education practices. It consists of five underlying characteristics: multiage grouping of students, nongradedness, teaming, differentiated staffing, and shared decision making. The Instructional Programing Model is a cyclic seven step process used to plan, implement, and evaluate instructional programs for children. It has four underlying characteristics: instructional programing, continuous progress, criterion-referenced assessment, and preassessment.

Home-school-community relations was defined as the resolution of actual or potential conflict among various subpublics which may be associated with policy decisions or administrative practices which determine: (1) the use of scarce economic resources, (2) the value choices to

be made regarding the educational program, and (3) the locus of power in the education enterprise.

Within this framework this study had two objectives:

1. To describe the characteristics of the multiunit school and the Instructional Programing Model.

2. To analyze the interrelationships between the characteristics identified in Objective 1 by identifying and describing each in terms of the allocation of (1) scarce economic resources, (2) educational values, and (3) power.

This case study was exploratory in design. The two school sites selected for this research were drawn from the eight schools participating in the ongoing research effort by the Home-School-Community Relations Project of the Wisconsin Research and Development Center for Cognitive Learning. Minimum criteria were set so that the school represented an example of an operational program of Individually Guided Education. Repeated entry to the field in each school site was also desired. In the judgment of the project staff, the selected sites best met the criteria.

Data were collected through the use of in-depth interviews. The initial interviews were conducted in eight school sites by two-member research teams from the Home-School-Community Relations Project. This researcher was a member of the project staff. Interviewees were selected on a nomination, positional, and random basis. Subpublics interviewed were school staff members, central office administrators, school board members, students, parents, and non-parent community members.

The second phase interviews were conducted by this researcher in the two school sites selected for this research. Approximately twenty interviews were conducted at each school site. Interviewees were selected

on random, nominational, and positional bases. An open-ended interview schedule was developed to obtain substantive data regarding the operationalization of the multiunit school and the Instructional Programing Model. Interviews, each lasting approximately forty-five minutes, were held with principals, unit leaders, teachers, aides, and parents.

A data retrieval system was devised to code and retrieve the data gathered during the interviews. The data retrieval system consisted of coded and notched key-sort cards. The key-sort cards were used to record and code the interview data according to the major dimensions of the study. Pertinent demographic data were also coded on the key-sort card.

A case study was written to integrate the data generated at each school site. A rough draft of each case study was taken to each of the school sites to be read by the principal and one other individual selected by this researcher. The purpose of this reading was to verify the accuracy of the data presented in the case study. Minor changes were made and approved by the verifiers. A final draft of each case study was written

The data were analyzed by answering five exploratory questions. These questions were used to describe the multiunit school and the Instructional Programing Model in operational terms. Advantages and disadvantages associated with each of the characteristics were also identified. Allocations of economic resources, educational values, and power associated with each of the characteristics were determined. Conflict created by allocations of power, economic resources, and educational values associated with the characteristics of the multiunit school and the Instructional Programing Model were discussed.

Conclusions

The conclusions presented in this section are based upon the data presented in Chapter III and analyzed in Chapter IV. The conclusions are presented as they relate to each of the characteristics of the multi-unit school and the Instructional Programing Model. Several general conclusions will close this section of the chapter.

It is appropriate at this point to offer a word of caution concerning the tabulated data in this study. Within the exploratory design used in this study only a limited number of respondents were selected from each of the school sites. The conclusions drawn from the tabulated data in this study are to be regarded as only suggestive of possible relationships that can provide the basis for further research.

Multiage Grouping of Students

Multiage grouping was found to have both organizational and instructional dimensions. At the organizational level, the placement of students into Instruction and Research Units, multiage grouping was an objective; the objective being to purposely create groups of students that represented different grade or age levels. At the instructional level, multiage grouping was not an objective but a by-product of the process used to form the instructional groups. Thus, at the instructional level multiage grouping became dependent upon the process used to form the instructional group. Therefore, it would appear that grouping processes that are used to form instructional groups based upon needs, not age or grade level, would creat multiage instructional groups. It also appears that multiage grouping at the organizational level does not ensure multiage grouping at

instructional level.

Multiage grouping of students was a characteristic of the multiunit school that had primary benefit for students. It created an atmosphere in which students could grow socially and emotionally, experience a variety of different learning environments, and work with a varying number of different types of people. The school staff was also a beneficiary of many of the benefits of multiage grouping. These benefits focused upon instructional improvement through the effective use of time, materials, and teacher talent.

The data suggest that the ability of multiage grouping to provide an environment that "promotes social and emotional growth" is an attribute of multiage grouping that has the potential for conflict, particularly in relationship to primary-age children. This attribute of multiage grouping was one of the three most frequently nominated positive attributes of multiage grouping. It was also the most frequently nominated negative attribute of multiage grouping.

Nongradedness

Nongradedness was inconsistently defined and had few benefits. In School A the perceived community norms demanded grade level comparisons of students. This precluded the implementation of nongraded practices. In School B a variety of nongraded practices were used but with only a minimum of reported benefits.

These findings and conclusions lend support to one of the principles underlying the conceptual model of home-school-community relations

used in this research; change, to be implemented successfully, must be translated into visible and tangible benefits interpretable by the various subpublics within the school community.

Teaming

Teaming was implemented in both of the schools. Benefits of teaming for students and teachers were described by all subpublics. Parents perceived an improvement in teacher competency. Teaming was also a means by which students could work with many staff members. Aides, most of whom were also parents, perceived many of the same benfits as other parents but placed more emphasis upon the instructional benefits. It could have been anticipated that student benefits would be emphasized more by aides since they are directly involved with the instructional program and can identify specific advantages resulting from the team's efforts.

Teachers and unit leaders perceived an increase in the effective use of time, materials, and teacher talent. This was created through the increased dialogue between the staff members and the sharing of materials and ideas.

Disadvantages associated with teaming were minimal in comparison to its benefits. Unlike the minimal benefits of nongradedness, and its partial implementation, teaming provided many benefits and was a standard operational practice. These findings further suggest that the changes associated with the multiunit school must be translated into visible and tangible benefits if they are to be succesfully implemented.

Teaming also contained a reallocation of power. In the conven-

tional age-graded self-contained classroom most instructional decisions were made by the individual teachers. Teaming reallocated those decisions to the team. This reallocation is suggestive as a basis for conflict. A negative value attribute of teaming was identified as the loss of the traditional decision-making prerogatives of the individual teacher.

While there were no additional monies required to implement teaming, there was a reallocation of the existing resources used for instructional materials and supplies. Like the reallocation of power, the reallocation of resources moved from the individual classroom to the team. The reallocation of resources appeared to provide a benefit for the school staff since this new allocation pattern was identified as a positive value attribute of teaming.

Differentiated Staffing

Other than "providing students with access to a variety of different individuals" there were few advantages associated with differentiated staffing. Benefits associated with differentiated staffing were usually interpreted through another of the characteristics of the multiunit school, teaming.

With the differentiated staffing pattern implemented in both schools, it appeared that the unit leader role was a role to which power was ascribed. This was the only role that had formal access to both the Instructional Improvement Committee and the Instruction and Research Unit, the two formal decision-making components of the multiunit school organization. In addition, the unit leader role, having a liaison function, was

an identified link in the communication networks between the principal and the staff and between the various other Instruction and Research Units. While there were no conflicts associated with this particular role it could be speculated that the potential of conflict exists in this role if the power shifts dramatically from another role, the principal, to the unit leader role.

Conceptually, the power ascribed to the role of the unit leader was the same in both of the school sites; operationally, it was different. In School A the unit leader was able to make unilateral decisions concerning the organization and operation of the Instruction and Research Unit. Such decisions were legitimitized by those affected by the decisions. In School B decisions were made through group decision-making processes, the unit leader having influence in the decisions but not the unilateral power ascribed to the unit leader role in School A.

Access to the decision process is important in the exercise of power as defined in this study. The aide role was identified as a position that provided access for community members that may otherwise be unable to gain admittance to the school and its decision-making processes. The ability to gain the access is further highlighted by the aides participation in the decision process. While voting power was withheld from the aides that did participate, they were able to provide input into the decision process. In addition, they would be able to gain insight into the decision processes as well as an insight into the key influentials within the school itself.

Shared Decision Making

Shared decision making was implemented through the allocation of specific decision domains to the Instructional Improvement Committee and the Instruction and Research Unit. The benefits derived from shared decision making, however, were interpreted through another characteristic of the multiunit school, teaming. This would suggest that the implementation of shared decision making might best be implemented in association with teaming.

The Instructional Programing Model

The data relative to the four characteristics of the Instructional Programing Model were insufficient to generate any substantive conclusions. With the exception of the schools' following of the basic steps of the Instructional Programing Model, the remaining three characteristics, continuous progress, criterion-referenced assessment, and preassessment, were operationalized to a minimal degree. In the case of School A, continuous progress and criterion-referenced assessment were near absent from the operations of the Instruction and Research Unit.

A determination of the valued attributes associated with the characteristics of the Instructional Programing Model were impeded by a lack of a sufficient number of respondents that had either a positive or a negative value orientation toward each of the characteristics. There were no allocations of power or resources associated with the characteristics. Conflict associated with the characteristics was also not reported.

General Conclusions

Two general conclusions summarize the findings related to this study. First, the successful implementation and operationalization of the characteristics of the multiunit school and the Instructional Programing Model are related to the degree by which they can be translated into visible and tangible benefits easily interpreted by the various subpublics in the school community. In this study, it was found that the two characteristics of the multiunit school, multiage grouping of students and teaming, had been translated into visible and tangible benefits. Consequently, the implementation of these two characteristics were more successful than those characteristics that were not capable of being translated into visible and tangible benefits.

The Instructional Programing Model illustrates the effect of the inability to translate its four underlying characteristics into visible and tangible benefits. There were many different interpretations of the characteristic and how, if at all, it was operationalized. As a result, with the exception of each school generally following the basic steps in the Instructional Programing Model, each of the remaining three characteristics were implemented in a variety of ways to a varying degree.

Second, actual or potential conflict is more likely to result from differing education values associated with the characteristics of the multiunit school and the Instructional Programing Model than either their allocation of power or resources. While there was only a minimal amount of conflict associated with the characteristics, differing educational values were identified as the source of conflict that did occur. The different values also held the potential for conflict if issues arose in

the community.

Implications

The purpose of this research was to examine the interpretations of two components of Individually Guided Education, the multiunit school and the Instructional Programing Model, as they related to a third component, home-school-community relations. Findings and conclusions are suggestive of several implications.

An overriding series of implications focus upon the need for expanded and improved training programs related to the implementation and refinement of Individually Guided Education and its related practices. First, the training should include activities that interrelate the various characteristics of the multiunit school, such as teaming, shared decision making, and differentiated staffing, in order that the workshop participants can acquire the skills necessary to "put them all together" into an effective multiunit school.

Second, during all training workshops those characteristics of the multiunit school and the Instructional Programing Model that are not visible and tangible to the participants must be made visible and tangible to them so that they can subsequently operationalize the characteristics in their own schools. The acquisition of knowledge related to each of the characteristics and the ability to operationalize them would enable participants to translate the benefits of the characteristics to students, parents, and teachers.

Third, particular emphasis should be placed upon knowledge of the Instructional Programing Model and skills and processes related to its

operationalization. This is particularly important because it is seen as the central focus of Individually Guided Education; in fact, higher educational achievement is the major purpose of Individually Guided Education. In addition, the Instructional Programing Model forms the central focus of home-school-community relations programs.

Fourth, the training process should also teach participants a variety of skills in analysis and communication in order to clarify the benefits of the multiunit school and the Instructional Programing Model in terms of educational values, power, and economic resources. These skills become increasingly important during the orientation of staff, students, parents, and community.

Fifth, training should emphasize the relationship between home-school-community relations and the Instructional Programing Model. The Instructional Programing Model forms the hub around which home-school-community relations is built. The instructional program and its other related activities provide the focal point of interaction between and among the various subpublics in the school community. The first three steps of the Instructional Programing Model call for interaction between the home and the school in order to gain an insight into the home setting, community norms and expectations, and student background in order for the parents and the school staff to effectively develop an appropriate instructional program for children. A lack of understanding of the Instructional Programing Model would imply a reduced need for that interaction. This would have a profound impact upon the current model of home-school-community relations and ultimately, student achievement.

Finally, the training program should emphasize that the acceptance of Individually Guided Education implies a commitment to the Instructional Programing Model. Specifically, this implication means that practitioners of Individually Guided Education can not pick and choose only those components that seem to be attractive for one reason or the other. The very nature of Individually Guided Education is such that it is a complex and comprehensive system of education and instruction that may require substantial changes from conventional policies and practices characteristic of the age-graded, self-contained elementary classroom. The primary reason for Individually Guided Education is to improve student learning and a commitment to the Instructional Programing Model is critical in achieving this goal.

The findings and conclusions of this study are also suggestive of additional research. First, Individually Guided Education, the multiunit school in particular, requires the interaction of many different individuals within the school setting. Unlike the conventional age-graded, self-contained classroom where professional interaction is more incidental or informal than necessary, conflict resulting from personality and value differences are accentuated in the multiunit school where continual professional interaction is mandatory. Are there personality and value orientations that would either accentuate or inhibit individuals from being succesful in an Individually Guided Education Environment?

Second, the focus of Individually Guided Education is upon student achievement. The Instructional Programing Model was developed to enable the school staff to plan, implement, and evaluate instructional programs. The multiunit school was designed to facilitate instructional programing

for the individual student. Are there characteristics of the multiunit school and the Instructional Programing Model which enhance student achievement? Likewise, are there characteristics of the multiunit school and the Instructional Programing Model that have resulted from education's attempt to inculcate educational "jargoneeze" into programs that have no direct affect upon-instructional improvement?

Finally, there is a need to replicate this study with a larger sample and to examine some of the other components of Individually Guided Education. In particular, there is a need to include a wider range of community subpublics and relate relevant community variables, such as community type and degree of citizen participation, to the effective implementation of Individually Guided Education and its related practices. Probably most important of all there is a need for a better understanding of, "What does Individually Guided Education mean to children?

BIBLIOGRAPHY

Books

Agger, Robert E., Goldrich, Daniel, and Swanson, Bert E. "A Political-Decision-Making Model," in THE SEARCH FOR COMMUNITY POWER, edited by Willis D. Hawley and Frederick M. Wirt. Englewood Cliffs, N.J.: Prentice-Hall Inc. 1968.

Becker, Howard S., Greer, Blanette, Hughes, Everett C., and Strauss, Anselm L. BOYS IN WHITE. Chicago: The University of Chicago Press. 1961.

Bowles, B. Dean, and Fruth, Marvin J. "Improving Home-School-Community Relations," in THE PRINCIPAL AND INDIVIDUALLY GUIDED EDUCATION, edited by James L. Lipham and Marvin J. Fruth. Reading, Mass.: Addison Wesley Publishing Company. 1976 (In Press).

Cannell, Charles F., and Kahn, Robert L. "The Collection of Data by Interviewing," in RESEARCH METHODS IN THE BEHAVIORAL SCIENCES, edited by Leon Festinger and Daniel Katz. New York: Holt, Rinehart and Winston. 1953.

Easton, David. A FRAMEWORK FOR POLITICAL ANALYSIS. Englewood Cliffs, N.J.: Prentice Hall, Inc. 1965.

Flanders, N. A. ANALYZING TEACHER BEHAVIOR. Reading, Mass.: Addison Wesley. 1970.

Glaser, Barney G., and Strauss, Anselm L. THE DISCOVERY OF GROUNDED THEORY: STRATEGIES FOR QUALITATIVE RESEARCH. Chicago: Aldine-Atherton. 1967.

Halpin, Andrew. "Chapter II," in LEADER BEHAVIOR: ITS DESCRIPTION AND MEASUREMENT, edited by Ralph M. Stogdill and Alvin E. Coons. Columbus, Ohio: Ohio State University.

Iannaccone, Laurence. "An Approach to the Informal Organization of the School," in BEHAVIORAL SCIENCE AND EDUCATIONAL ADMINISTRATION, edited by Daniel E. Griffiths. Chicago: The National Society for the Study of Education, 1964.

Klausmeier, Herbert J., Quilling, Mary R., Sorenson, Juanita S., Woy, Russel S., and Glasrud, George R. INDIVIDUALLY GUIDED EDUCATION: GUIDELINES FOR IMPLEMENTATION. Madison, Wisconsin: Wisconsin Research and Development Center for Cognitive Learning. 1971.

Lasswell, Harold D. POLITICS: WHO GETS WHAT, WHEN, HOW. Cleveland, Ohio: World Publishing Co. 1964.

Lasswell, Harold D., and Kaplan, Abraham. POWER AND SOCIETY: A FRAMEWORK FOR POLITICAL INQUIRY. New Haven, Conn.: Yale University Press. 1950.

Lipham, James L., and Fruth, Marvin J., eds. THE PRINCIPAL AND INDIVIDUALLY GUIDED EDUCATION. Reading, Mass.: Addison Wesley Publishing Company. 1976 (In Press).

Lutz, Frank W., and Iannaccone, Laurence. UNDERSTANDING EDUCATIONAL ORGANIZATIONS: A FIELD STUDY APPROACH. Columbus, Ohio: Charles E. Merrill Publishing Company. 1969.

McCarty, Donald J., and Ramsey, Charles E. THE SCHOOL MANAGERS. Westport, Conn.: Greenwood Publishing Corp., 1971.

Saxe, Gilbert. EMPIRICAL FOUNDATIONS OF EDUCATIONAL RESEARCH. Englewood Cliffs, N.J.: Prentice-Hall, Inc. 1968.

Truman, David B. THE GOVERNMENTAL PROCESS: POLITICAL INTERESTS AND PUBLIC OPINION. Second Edition. New York: Alfred A. Knopf. 1971.

Van Dalen, Deobold B., and Meyer, William J. UNDERSTANDING EDUCATIONAL RESEARCH: AN INTRODUCTION. New York: McGraw Hill, Inc. 1966.

Wirt, Frederick M., and Kirst, Michael M. THE POLITICAL WEB OF AMERICAN SCHOOLS. Boston: Little, Brown and Company. 1972.

Yuchtman, Ephraim, and Seashore, Stanley E. "A System Resource Model Approach to Organizational Effectiveness," in READINGS IN ORGANIZATIONAL BEHAVIOR AND HUMAN PERFORMANCE: REVISED EDITION, edited by W. E. Scott and L. L. Cummings. Homewood, Ill.: Richard D. Irwin, Inc. 1973.

Periodicals

Charters, W. W. Jr., and Pellegrin, Roland J. "Barriers to the Innovation Process: Four Case Studies of Differentiated Staffing," EDUCATIONAL ADMINISTRATION QUARTERLY, Vol. 9 (Winter, 1973).

Hage, Jerald. "An Axiomatic Theory of Organizations," ADMINISTRATIVE SCIENCE QUARTERLY, 10 (1965), 289-320.

Lutz, Frank M., and Ramsey, Margaret A. "The Use of Anthropological Field Methods in Education," EDUCATIONAL RESEARCHER, 3:10 (November, 1974), 5-9.

Zelditch, Morris, Jr. "Some Methodological Problems of Field Studies," AMERICAN JOURNAL OF SOCIOLOGY, 67 (1962), 566-576.

Reports

Cook, Doris M., Wardrop, James L., Tagatz, Glenn E., Quilling, Mary, Kamla, Dwane, and Shuman, Edna. RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF TWO ELEMENTARY SCHOOLS OF JANESVILLE, WISCONSIN, 1966-1967. Technical Report No. 45. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning, 1968.

Evers, Nancy A. AN ANALYSIS OF THE RELATIONSHIP BETWEEN THE EFFECTIVENESS OF THE MULTIUNIT ELEMENTARY SCHOOL'S INSTRUCTION AND RESEARCH UNIT AND INTERPERSONAL BEHAVIORS. Technical Report No. 298. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1974.

_____. IGE/MUS-E FIRST YEAR IMPLEMENTATION COST SURVEY. Technical Report No. 256. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1973.

Goodson, Max R., and Hagstrom, Warren O. CHANGING SCHOOLS: CASE STUDIES OF CHANGE-AGENT TEAMS IN THREE SCHOOL SYSTEMS. Technical Report No. 177. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning, 1971.

Gramenz, Gary William. RELATIONSHIP OF PRINCIPAL LEADER BEHAVIOR AND ORGANIZATIONAL STRUCTURE OF THE IGE/MUS-E TO I & R UNIT EFFECTIVENESS. Technical Report No. 320. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1974.

Herrick, H. Scott. THE RELATIONSHIP OF ORGANIZATIONAL STRUCTURE TO TEACHER MOTIVATION IN MULTIUNIT AND NON-MULTIUNIT ELEMENTARY SCHOOLS. Technical Report No. 322. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1974.

Hilfiker, Leo R. A PROFILE OF INNOVATIVE SCHOOL SYSTEMS. Technical Report No. 172. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning, 1971.

Howes, Nancy J. CHANGE FACTORS RELATED TO THE INSTITUTIONALIZATION OF THE MULTI-UNIT ELEMENTARY SCHOOL. Technical Report No. 319 (Parts 1 and 2). Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning, 1974.

Ironside, Roderick A. A SUPPLEMENT TO THE 1971-1972 NATIONWIDE INSTALLATION OF THE MULTIUNIT IGE MODEL FOR ELEMENTARY SCHOOLS--A PROCESS EVALUATION: THE FALL 1972 FOLLOW-UP. Princeton, N.J.: Educational Testing Service, 1973.

____. THE 1971-72 NATIONWIDE INSTALLATION OF THE MULTIUNIT/IGE MODEL FOR ELEMENTARY SCHOOLS: A PROCESS EVALUATION. Volumes I and II. Princeton, N.J.: Educational Testing Service, 1972.

Kelley, Edgar A., Wood, Fred H., and Joekel, Ronald. "Teacher Perceptions of School Climate and the Implementation of Individually Guided Education." A Report of a research study conducted at Teachers College, University of Nebraska, Lincoln, Nebraska, August, 1973. ERIC ED 083229.

Klausmeier, Herbert J., Cook, Doris M., Goodwin, William L., Tagatz, Glenn E., and Pingel, Louis. INDIVIDUALIZING INSTRUCTION IN LANGUAGE ARTS THROUGH DEVELOPMENT AND RESEARCH IN R & I UNITS OF LOCAL SCHOOLS, 1965-1966. Technical Report No. 19. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1967.

Klausmeier, Herbert J., and Quilling, Mary, eds. RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF FOUR ELEMENTARY SCHOOLS OF MADISON, WISCONSIN, 1966-1967. Technical Report No. 48. Madison, Wis.: Wisconsin Research and Development Center for Congitive Learning. 1968.

Klausmeier, Herbert J., Quilling, Mary, and Sorenson, Juanita S. THE DEVELOPMENT AND EVALUATION OF THE MULTIUNIT ELEMENTARY SCHOOL. Technical Report No. 158. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1971.

Klausmeier, Herbert J., Quilling, Mary, and Wardrop, James L. RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF FIVE ELEMENTARY SCHOOLS OF RACINE, WISCONSIN, 1966-1967 Technical Report No. 52. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1968.

Kreitlow, Burton W. EVALUATING THE INFLUENCE OF CHANGE-AGENT TEAMS ON THE ORDER OF CHANGE PROCESSES OF SCHOOL SYSTEMS: A TEST OF THE MODEL FOR EDUCATIONAL IMPROVEMENT. Technical Report No. 214. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1972.

Morrow, Richard G., Quilling, Mary R., and Fox, Frank. STUDENT ACHIEVEMENT AND ATTITUDES IN INSTRUCTION AND RESEARCH UNITS IN TWO ELEMENTARY SCHOOLS IN JANESVILLE, WISCONSIN, 1967-68. Technical Report No. 76. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1969.

Paul, Douglas A. THE DIFFUSION OF AN INNOVATION THROUGH INTER-ORGANIZATIONAL LINKAGES: A COMPARATIVE CASE STUDY. Technical Report No. 308 (Parts 1 and 2). Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1974.

Pellegrin, Roland J. SOME ORGANIZATIONAL CHARACTERISTICS OF MULTIUNIT SCHOOLS. Working Paper No. 22. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1969.

Quilling, Mary, Cook, Doris M., Wardrop, James L., Klausmeier, Herbert J., Baldwin, Ruth, and Loose, Caroline. RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF TWO ELEMENTARY SCHOOLS OF MILWAUKEE, WISCONSIN, 1966-67. Technical Report No. 46. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1968.

Sheridan, Terrance John. PERCEIVED ROLE AND EFFECTIVENESS OF THE UNIT LEADER IN CONDUCTING UNIT FUNCTIONS. Technical Report No. 318. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1974.

Smith, Kenneth Blaine. AN ANALYSIS OF THE RELATIONSHIP BETWEEN EFFECTIVENESS OF THE MULTIUNIT ELEMENTARY SCHOOL'S INSTRUCTIONAL IMPROVEMENT COMMITTEE AND INTERPERSONAL AND LEADER BEHAVIORS. Technical Report No. 230. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1972.

Walter, James E. THE RELATIONSHIP OF ORGANIZATIONAL STRUCTURE TO ORGANIZATIONAL ADAPTIVENESS IN ELEMENTARY SCHOOLS. Technical Report No. 276. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1973.

Wardrop, James L., Cook, Doris M., Quilling, Mary, Klausmeier, Herbert J., Espeseth, Constance, and Grout, Carolyn. RESEARCH AND DEVELOPMENT ACTIVITIES IN R & I UNITS OF TWO ELEMENTARY SCHOOLS OF MANITOWOC, WISCONSIN, 1966-1967. Technical Report No. 35. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning. 1967.

Unpublished Materials

Benka, John Thomas. "The Director of Instruction as an Agent in Organizational Change." Unpublished doctoral dissertation, University of Wisconsin, Madison, 1972.

Bernal, Leslie Charles. "The Introduction of the Individually Guided Education/Multiunit Elementary School Model in Selected Elementary Schools and the Effects on Organizational Output." Unpublished Ed.D. dissertation, Boston University School of Education, 1973.

Bowers, George Robert. "The Organizational Climate in Selected Multiunit and Traditional Elementary Schools. Unpublished Ed.D. dissertation, University of Akron, 1973.

Carter, Joy B. "A Study of the Effects of Multi-grade Grouping on the Attitudes Toward Self, Peers, and School of Selected Third and Fifth Grade Students." Unpublished doctoral dissertation, Michigan State University, 1973.

Diener, Jacquelyn M. "Identification and Evaluation of the Home-School-Communications Program in Thirteen Individually Guided Education Schools in Alabama." Unpublished Ed.D. dissertation, Auburn University, 1972.

Dutil, Harvey Lewis. "Sense of Power and its Relation to Selected Teacher Characteristics and Selected Structural Characteristics of Elementary Schools." Unpublished Ph.D. dissertation, University of Connecticut, 1974.

Edwards, Floyd Henry. "A Study of Affective Change in Elementary Schools Implementing Individually Guided Education." Unpublished Ed.D. dissertation, University of North Carolina at Chapel Hill, 1972.

Essig, Don Moe. "The Effects of a Multi-unit, Differentiated Staffing Organization Upon Teachers' Attitudes and Instructional Programs." Unpublished doctoral dissertation, University of Oregon, 1971.

Gavin, Milton Strand. "Relationship of School Plant Characteristics to Components of Individually Guided Education Programs in Wisconsin." Unpublished doctoral dissertation, University of Wisconsin-Madison, 1974.

Godfrey, Margaret Prendergast. "Staff Participation in Decision-Making Procedures in Elementary Schools." Unpublished doctoral dissertation, University of Connecticut, 1968.

Grant, Merrill Alan. "A Survey of the Perceptions of Teachers and Principals Toward the Multiunit School Organization." Unpublished Ed.D. dissertation, University of Toledo, 1973.

Guappone, Carmen A. "An Analysis of the Process of Change Toward a Nongraded Elementary School." Unpublished Ed.D. dissertation, University of Pittsburgh, 1972.

Hackett, Jack, and McKiligin, George. "A Study of the Multiunit-IGE Elementary Schools." A Report prepared at the request of the Board of Education, Janesville, Wisconsin, August, 1972.

Halverson, James R. "Development and Testing of an Instrument to Measure the Degree of Implementation of Individually Guided Education Processes." Unpublished doctoral dissertation, Drake University, 1974.

Iannaccone, Laurence. "The Field Study in Educational Policy Research." Address prepared for the University of Wisconsin-Madison Conference "Policy Research: Methods and Implications," May 2, 1974 (Mimeographed).

Jacobs, Claire Macaulay. "A Comparison of Attitudes of Team and Non-Team Teachers Toward Various Aspects of Teaching." Unpublished Ed.D. dissertation, Northern Illinois University, 1968.

Joyal, Lloyd Harold, Jr. "A Comparison of the Types of Learning Patterns on Students in a Self-Contained and Multiunit Elementary School." Unpublished doctoral dissertation, University of Wisconsin-Madison, 1973.

Kennedy, Frank M., et al. "The Multiunit Elementary School and Individualization." A Report to the Board of Education, Cedarburg, Wisconsin, 1972.

Krupa, Walter E. "Development of an Instrument to Assess Home-School-Community Relations in Individually Guided Education." Dissertation in progress, University of Wisconsin-Madison.

Lacy, Dennis Gale. "Methods of Introducing Individually Guided Education (IGE) Programs in Selected School Systems in Indiana (1972)." Unpublished Ed.D. dissertation, Indiana University, 1972.

Lober, Irene Moss. "Individually Guided Education--Resource Model." Unpublished Ed.D. dissertation, Virginia Polytechnic Institute and State University, 1974.

Loose, Caroline Alma. "Decision-Making Roles and Patterns of the Instructional Improvement Committee (IIC) in Selected Eastern Wisconsin Multiunit Elementary Schools Organized Since 1967." Unpublished doctoral dissertation, University of Wisconsin-Milwaukee, 1973.

Mantzke, Jimmie Wayne. "An Analysis of the Effectiveness and Satisfaction of Teachers, Principals, and Superintendents Who Function Within Undifferentiated and Differentiated (IGE/MUS-E) Staffing Structures in the State of Wisconsin." Unpublished doctoral dissertation, University of Wisconsin-Madison, 1973.

Menzel, Richard Clarence. "Leader Behavior of Unit Leaders in Selected Multiunit Elementary Schools," Unpublished Ed.D. dissertation, University of Northern Colorado, 1974.

Miles, William R. "Home-School-Community Relations as a Political Process." Dissertation in progress, University of Wisconsin-Madison.

Moeller, Gerald Herbert. "The Relationship Between Bureaucracy in School System Organization and Teachers' Sense of Power." Unpublished Ed.D. dissertation, Washington University, 1962.

Murray, Donald George. "Organization Development Training for Adopting Multiunit Structure. A Comparative Case Study of Two Elementary Schools." Unpublished doctoral dissertation, University of Oregon, 1973.

Nelson, Richard Gardner. "An Analysis of the Relationship of the Multiunit School Organizational Structure and Individually Guided Education to the Learning Climate of Pupils." Unpublished doctoral dissertation, University of Wisconsin-Madison, 1972.

Olson, Willard Russell. "Differentiated Staffing: The Team Leader Role in Elementary School Team Teaching." Unpublished doctoral dissertation, University of Utah, 1971.

Oszewski, Rev. Donald William. "The Effect of a Multiunit/Open Space School Structure on Teacher Behavior." Unpublished doctoral dissertation, University of Notre Dame, 1973.

Richardson, Edward Ray. "A Study of the Changes in Role Perception and Role Behaviors of Principals in Individually Guided Education Multiunit Elementary Schools." Unpublished Ed.D. dissertation, Auburn University, 1972.

Singe, Anthony Louis. "A Study of the Relationship Between Work Group Performance and Leader Motivation, Leader Behavior, and Situational Favorableness: An Application of the Contingency Theory of Leadership Effectiveness to Group Supervision in Multiunit Elementary Schools." Unpublished doctoral dissertation, University of Connecticut, 1974.

Smith, Mary Ann Rasmusen. "A Comparison of Two Elementary Schools Involved in a Major Organizational Change: Or You Win a Few, You Lose a Few." Unpublished doctoral dissertation, University of Oregon, 1972.

Strunka, Joseph Vincent. "The IGE Facilitator as Perceived by IGE Principals, Unit Leaders, and Facilitators." Unpublished doctoral dissertation, University of Nebraska-Lincoln, 1974.

Wald, Larry Anderson. "An Analysis of the Effects of an Intervention Program on IGE Intermediate Agency Facilitators," Unpublished Ed.D. dissertation, Indiana University, 1972.

Wenger, Robert Joseph. "A Study of the Relationship Between Institutional Conflict and a Working Consensus of Values," Unpublished Ed.D. dissertation, University of California-Los Angeles, 1972.

White, Steven Joel. "The Impact of Paid Instructional Aides on the Time Allocations for Teaching Activities in the Multiunit Elementary School." Unpublished Ph.D. dissertation, University of Wisconsin-Madison, 1974.

Wisconsin Research and Development Center for Cognitive Learning. A Final Report to the National Institute of Education for Grant No. NE-G-00-3-0221, THE IMPLEMENTATION OF IGE: 1973-1974. Madison, Wis.: Wisconsin Research and Development Center for Cognitive Learning, 1974 (Mimeographed).

Wright, Clarence Daniel. "Formative Analysis of Selected IGE Schools in Alabama to Determine the Extent to Which these Schools are Individualized." Unpublished Ed.D. dissertation, Auburn University, 1972.

APPENDIX A

Sample Interview Schedule
For Phase One Data Collection

School _____ Appointment _____

Interviewer _____ Address _____

Interview Beg. _____ End _____ Phone _____

Total Time _____

Background Information:

Children Number ____; Length of residence _____; How long teaching (admin.) _____

# of Children in (name) School _____.

Names of Children _____

I. INTRODUCTION

A. Who interviewer is
B. Where interviewer comes from
C. What does interviewer do
D. Why particular school selected
E. Why respondent selected
F. Nature of project
G. What happens to the information
   1. Anonymity of information
   2. Result dissemination
H. Does respondent have any questions

Present card with five questions.

II. Could you tell me a little bit about the ___ school and its community? (Probe: Before IGE; kids; staff; community, etc.) (Probe: School/community history; Student body characteristics; Organizational history; When got into IGE; Before IGE, what kind of school; Staff characteristics; Socio-economic characteristics of community

III. Could you tell me about any of the programs or activities which involve the home, the school, or the community? (Probe: Analytical Code; Open house; Planning; Report cards)

IV. How did IGE get started at ___ school? (Probe: Are there other programs or activities associated with IGE implementation that we haven't already talked about? Probe: Analytical Code)

V. Can you think of any other things that have helped or hindered school-community relationships? (Probe: Issues, Problems, Concerns, Crises; Second Analytical Code)

Analytical Code

1. IGE/non-IGE
2. Crisis or planned?
3. Initiation
4. Implementation
   a. How it was organized
   b. Who's responsible?
   c. Who coordinates?
   d. How does it operate?
5. Involvement
   a. Professional staff
   b. "Non" professional
6. Results
   a. Does it do what it is supposed to do?
   b. Suggested Improvements

---

1. Favorable/Unfavorable
2. Child/parent/school/community orientation
3. Individual/Groups
4. Resolvable/Unresolvable
   Why?
   With whom? Dates/Names
   Places
5. Past/present/future

APPENDIX B

Sample Interview Schedule
For Phase Two Data Collection

Name _____ School _____

		P	R	V	I	D
___	M-AGE					
___	N-GRADE					
___	D-STAFF					
___	S-DEC					
___	TEAM					
___	C-PROG					
___	INST PROG					
___	CRIT					
___	PREASMT					

MULTIAGE GROUPING OF STUDENTS

How are children assigned to units?

Learn with older/younger children?

Teaching several grade-levels of children.

NONGRADEDNESS

Attitudes changed because of no grade label.

DIFFERENTIATED STAFFING

Relationships between positions,

Reasons for assuming role.

Operational changes because of new roles.

Working with non-certificated personnel.

TEAMING

Working/sharing with colleagues.

Who is responsible for teaching each child?

What does team do?

SHARED DECISION MAKING

Who determines what happens at school?

Role in decisional process. Kind, Content, Role(formal-informal)

IIC = Program determination I&R Unit = Program implementation

CONTINUOUS PROGRESS

Describe the curricular sequence of program.

How does a child progress through the instructional program?

Continuity of instructional between units.

INSTRUCTIONAL PROGRAMMING

How is the instructional program developed?

How do teachers plan for the specific instructional activities for the children?

CRITERIA REFERENCED TESTING

What is the standard used to determine student progress, achievement, etc?

PREASSESSMENT

How is student placement in an instructional group determined?

What information is gathered during the preassessment phase and what use is made of it?

How do you feel about being tested on information that has not been taught?

Date_____ School:

Respondent_____ Interviewer: W. Klenke

Address_____

Classification: PR CL T A PA S Other_____

Selection: POSITIONAL Title_____

RANDOM How and by whom_____

NOMINATED By whom_____ Basis_____

SELECTED KNOWLEDGEABLES By whom_____ Basis_____

Respondent Background: School Staff

District Tenure_____

School Tenure_____

Other Experience_____

Respondent Background: Parents and other non-school staff

Names of Children_____

Names of children at this school and the unit to which they are assigned_____

_____

At school before IGE____ At school when IGE implemented____ At school after IGE____

Residence History_____

IGE TIMELINE

Jan '72 Parents request IGE
Mar '72 ( ) named principal
Apr '72 School staffed
May '72 Meetings with parents
Aug '72 Staff inservice
Sep '72 School opens late
Oct '72 Parent/Unit meetings
Nov '72 Report Card Flack
Dec '72 Boundary Committee

Aug '73 Program changes made
Sep '73 Kids bused out
Jan '74 More kids pulled out
May '74 ( ) resigns

H-S-C RELATIONS ACTIVITIES

Parent Volunteers
Parent Advisory Board

Principal Coffees
PTO

Conferences

I. INTRODUCTION

A. Who interviewer is
B. Where interviewer is from
C. Thrust of previous research
E. Purpose of this follow-up research
   1. Purpose; To look at and describe IGE
   2. How respondent selected
   3. Information is anonymous but not confidential
   4. Dissemination of results
F. Complete/Verify background data
G. Any Questions?

II. The school PRIOR TO IGE (Has been IGE since it was opened in 1972) Purpose of this portion of interview is to get a feel for what the interviewee's expectations were for ( ).

Respondent School Date

II. CURRENT OPERATION OF THE MUS-e and the IPM: Purpose is to describe the operation of the Unit and the IIC and how the individual interprets that operation.

PROBES: Organization of unit and IIC. Assignment of children to units. How and who determines the curriculum and instruction activities. What resources are utilized and how are they utilized.

ANALYTICAL CODE

1. Power
   - *Hierarchical/ positional relation.
   - *Decision types
   - *Decisional sequence
   - *Decisional input
   - *Represents change/ describe.
2. Values
   - *Results in improvement Why
   - *Results in hindrance Why
   - *Change: Gives, deprives, discriminates.
3. Resources
   - *Source
   - *Form
   - *Location/authority to distribute
   - *How distributed
   - *Basis for utilization
4. Issues generated by characteristic
   - *Initiation
   - *Involvement
   - *Resolution

Respondent School Date