

The Pennsylvania State University
The Graduate School
College of Education

**SHARING DECISIONS, TEACHING IN TEAMS, AND MULTI-AGING:
INDIVIDUALLY GUIDED EDUCATION, 1965-1981**

A Thesis in
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by
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Abstract

In an effort to enhance our understanding of public school reform, this study aimed: (1) to explore how Individually Guided Education (IGE) was developed and disseminated nationwide during 1965-1973; (2) to determine the extent to which Individually Guided Education was adopted, implemented, and continued by public elementary schools nationwide during 1969-1981; and (3) to identify what factors either facilitated or hindered the processes of mobilizing, implementing, and institutionalizing Individually Guided Education during 1969-1981.

This historical case study relied upon primary source materials, including, but not limited to: Quarterly/Semi-annual/Annual Progress Reports on the Wisconsin Research and Development Center, Theoretical/Technical Reports, Working Papers, manuals for IGE implementation, documents on leadership development conferences and inservice teacher training workshops, curricular materials published at the Center; evaluation reports on nationwide installation and continuation of IGE; more than 120 doctoral dissertations at 37 colleges and universities in 23 states; ERIC documents; and written interviews with IGE creators.

Based on their degree of implementation, IGE schools were categorized into four groups in ascending order: opportunistic, nominal, marginal, and true IGE schools. These groups accounted for about 20%, 40%, 20%, and 20% of the total IGE schools, respectively. In these groups of IGE schools, different factors either facilitated or hindered the processes of mobilizing, implementing, and institutionalizing IGE. Four factors played a major role in the phase of mobilization for IGE: locus of decision, need for a change, readiness, and resources. In the phase of implementation, four factors supported or constrained the processes of implementing IGE in successful and less successful IGE schools: staff development, role relationship change, shared decision-making, and district support. Three factors facilitated the successful institutionalization of IGE: external support, continued inservice for the staff, and creative modification of the IGE program.

Opportunistic IGE schools were characterized by top-down decisions, the staff feeling no need for a change, the staff unprepared, and no resources. These opportunistic IGE schools were known to have adopted, but did not implement IGE at all.

Nominal IGE schools were known for top-down decisions, the staff feeling no need for a change, the staff unprepared, and few resources in the stage of mobilization. Without a good start in the phase of mobilization, nominal IGE schools showed the following characteristics in the implementation phase: little staff development, no change in role relationship and shared decision-making, and no district support. Failing to change the traditional organization and instructional practices, nominal IGE schools discontinued IGE after a period of unsuccessful implementation.

Marginal IGE schools were characterized by top-down decision, the staff feeling no need for a change, the staff unprepared, but some resources utilized in the mobilization phase. In the phase of implementation, marginal IGE schools showed some staff development, mild change in role relationship and shared decision-making, and little/some district support. Although these marginal schools implemented IGE to a higher degree than nominal IGE schools, most of them ultimately failed to institutionalize IGE.

Unlike the above schools, in true IGE schools the adoption decision was made jointly between the principal and staff, the staff sought a change, the staff was ready for change, and the school acquired sufficient resources during the mobilization phase. Further, in the stage of implementation, true IGE schools showed sufficient staff development, role relationship change, shared decision-making, and district support. In the institutionalization phase, true IGE schools had adequate external support, engaged in continued inservice, and modified IGE creatively.

This study found that only about 20% of the total IGE schools successfully replaced age-graded, self-contained classrooms. In order to explain the reasons for this low degree of IGE reform in the majority of IGE schools, and the reasons for the high degree of IGE reform in true IGE schools, this study reveals key factors that are important to consider in different phases of innovation in order to increase the possibility of institutionalizing current school reform programs.

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List of IGE Acronyms

AIGE: Association for Individually Guided Education
DMP: Developing Mathematical Processes
DPI: The Department of Public Instruction
ESEA: The Elementary and Secondary Education Act of 1965
H-S-C: Home-School-Community Relations
/I/D/E/A/: The Institute for the Development of Educational Activities, Inc.
IEA: Intermediate Education Agencies
IGM: Individually Guided Motivation
IIC: Instructional Improvement Committee (school building level)
IPM: Instructional Programming Model
I&R: Instruction and Research Unit (classroom level)
MODELS: Maximizing Opportunities for Development and Experimentation in Learning in the Schools
MUSE: Multi-unit School-Elementary
NIE: National Institute of Education
PRS: Pre-Reading Skills Program
R&D Center (or Center): The Research and Development Center for Learning and Re-Education (1964-1966); The Research and Development Center for Cognitive Learning (1966-1976); The Research and Development Center for Individualized Schooling (1977-1982); and The Wisconsin Center for Education Research (1982-present)
RICC: Regional IGE Coordinating Council
SEA: State Education Agencies
SICC: State IGE Coordinating Council
SPC: System-wide Policy (or Program) Committee (school district level)
TEI: Teacher Education Institutions
USOE: The United States Office of Education
UW/SRF: The University of Wisconsin/ Sears-Roebuck Foundation
WDRSD: Wisconsin Design for Reading Skill Development
WIP: The Wisconsin Improvement Program

Prologue: Learning from the Experience of IGE

In the 20th century history of American education, some major societal change – typically called a “crisis” – often triggered a burst of concern about schooling. In such times of “crisis,” civic, business, and educational leaders all starkly exposed problems and confidently proposed educational solutions. Individually Guided Education (IGE) was one such solution to the problems found in the public schools during the 1960s.

The developers of IGE at the Wisconsin Research and Development Center observed that in traditionally organized schools, the principal tended to be a building manager rather than an educational leader. Teachers, as an independent ruler of a classroom, had little time for planning and evaluating instructional activities. Nor were appropriate provisions made for differences among teachers in interests, knowledge, experience, and expertise. Also, functioning in relative isolation from other schools, the staff did not have communication networks for sharing creative ideas, materials, and instructional approaches. Moreover, students – placed in age-grade classes – were not provided for differences in rate of learning, style of learning, and other characteristics. Further, the typical school building and space configurations impeded varied types of grouping and learning activities (Klausmeier et al., 1977, p. 3; Walter et al., 1975, 3-4).

In an effort to present an alternative to this traditional age-graded, self-contained form of elementary schooling, the developers at the Center, with the help of practitioners in local schools in Wisconsin and the Wisconsin Department of Public Instruction, created the IGE elementary school where a group of teachers plan, carry out, and evaluate instructional programs cooperatively. In a typical IGE (multi-unit) school, the principal shares his/her authority with leaders of units in making decisions on managerial and technical domains and reaches decisions by consensus rather than unilaterally. The leader of a unit shares his/her authority with unit teachers in making decisions on such unit matters as planning, grouping, instructing, grading, and reporting to parents. Students in multi-aged (e.g., ages 6-8) units learn in various groups ranging from the whole unit meeting, to large group, medium group, small group, and one-to-one. Students progress based on their achievement, not based on their age or grade. Building facilities are modified to meet these organizational and instructional needs. Finally, a group of IGE

schools builds a network so that IGE practitioners share ideas, materials, and instructional approaches.

In 1967-68, the first seven multi-unit elementary schools were created in Wisconsin and were found successful in generating higher student achievement and positive student attitudes toward the school (Klausmeier et al., 1968, p. xi). In 1968-69, the Wisconsin Department of Public Instruction evaluated the multi-unit concept for its potential for enhancing educational opportunities for students and selected the concept for statewide adoption, installation and maintenance. This involvement of the Wisconsin State Department helped to increase the number of the multi-unit schools in Wisconsin to 99 by the school year 1970-71. Additionally, a total of 65 multi-unit schools were established in seven other states by 1970-71. After witnessing a dramatic increase in the number of IGE schools, the developers at the Center proposed the multi-unit concept for nationwide dissemination to the U.S. Office of Education which accepted the proposal and granted financial support for the nationwide installation of IGE in 1971.

During the large-scale installation period from 1971 to 1975, the developers at the Wisconsin R&D Center (and /I/D/E/A/)¹ engaged in massive implementation efforts, providing financial/technical assistance, leadership development workshops, and teacher training programs to State/Regional IGE Coordinating Councils, teacher education institutions, intermediate education agencies, district and school policymakers, administrators, and practitioners. Thanks to these efforts, combined with the financial support of almost thirty million dollars from three government agencies and two foundations, at least 3,000 schools were implementing IGE in forty states at the peak of this movement in 1976-77. Towards the late 1970s, however, IGE faded in prominence, according to the major developer of IGE, due largely to the withdrawal of federal support, the cessation of the Center's curricular and inservice materials development, ill-functioning state IGE networks, a nationwide property tax revolt started in the mid-1970s, and a "back-to-the-basics" movement that spread across the country (Klausmeier,

¹ After developing its own version of IGE (or 35 goals/outcomes for IGE model), the Institute for the Development of Educational Activities, Inc. (/I/D/E/A/), an educational affiliate of the Charles F. Kettering Foundation, joined the Wisconsin Center in publishing inservice materials from 1969 to 1972. However, the difference between these two parties in the policy of using inservice materials led to /I/D/E/A/ engaging in IGE implementation efforts independently.

1992). In addition, the evaluation study in 1977 by the Wisconsin Center revealed that only about 23% of 159 schools (selected through a stratified random sampling from 946 schools) had reorganized their staffs by forming units, exhibited shared decision making, and made efforts to change the pattern of instruction in their schools (Romberg, 1985, p. 72). Thus, the majority of IGE schools either failed to make the substantial organizational and instructional changes which reflect IGE (60% of 159) or tried to follow the multi-unit school model but encountered serious problems (13% of 159) (Romberg, 1985, p. 72).

IGE and the Research, Development, and Diffusion Model

Why did so many schools adopt IGE, but fail to implement it? I found that this big difference between the number of IGE schools (approximately 150) that implemented the IGE model to a large degree and the number of IGE schools (approximately 3,000) that were known to have adopted IGE was in large part related to the then popular Research, Development, and Diffusion (RD&D) model from which the developers of IGE and the Office of Education officials operated. This RD&D model was popular during the 1950s-60s in the United States and provided the rationale for much of the federal investment in basic research. Articulated by Clark and Guba (1965), this model consisted of four phases: research, development, diffusion, and adoption. The last phase – adoption – was added as it became apparent that many of the diffused changes were not being institutionalized.

The Wisconsin Center itself was established under provisions of the Cooperative Research Program of the US Office of Education that relied on the RD&D model. In 1964, the Cooperative Research Program included six major areas: (1) basic and applied research, (2) demonstration, (3) curriculum improvement, (4) small contract, (5) research and development centers, and (6) developmental activities. Further description of the research and development centers was given in OE Publication 12017, 1963, as follows:

Research and development centers are designed to concentrate human and financial resources on a particular problem area in education over an extended period of time in an attempt to make a significant contribution toward an understanding of, and an improvement of educational practice in, the problem area. More specifically, the personnel of a center will:

1. Conduct basic and applied research studies, both of the laboratory and field type.

2. Conduct development activities designed to translate systematically research findings into educational materials or procedures, and field test the developed products.
3. Demonstrate and disseminate information about the new programs or procedures which emerge from the research and development efforts. These activities may include demonstrations in a natural, or operational, setting; the preparation of films, tapes, displays, publications, and lectures; and the participation in symposia and conferences.
4. Provide nationwide leadership in the chosen problem area. (cited in Klausmeier, 1968, pp. 146-147).

Thus, the RD&D model dominated the Wisconsin Center's overall plan and activities. The Center personnel carried out activities incorporated in three programs during 1964-1966, four programs during 1966-1972, and twelve programs during 1972-1977. The three programs during 1964-1966 were: (1) basic research on concept learning, (2) concept learning in subject areas, and (3) other projects on adult re-education, the culturally disadvantaged, instructional television, social variables in learning, and research methods. The Center carried out work related to four programs from 1966 to 1972: (1) conditions and processes of learning, (2) processes and programs of instruction, (3) facilitative environments, and (4) dissemination and implementation. One of the projects under "Facilitative Environments" was called Project MODELS. Out of this project came an alternative approach to conventional elementary schooling -- IGE. After USOE selected IGE for nationwide implementation, the Center organized its activities around the IGE theme for the period 1972-77. The twelve programs from 1972 to 1977 included: (1) children's learning and development, (2) conditions of school learning and instructional strategies, (3) organization for instruction and administrative arrangements, (4) research feasibility studies, (5) developing mathematical processes, (6) Wisconsin Design for Reading Skill Development, (7) Pre-Reading Skills Program, (8) Individually Guided Motivation, (9) computer applications for IGE, (10) models for Individually Guided Education in the Multiunit School-Secondary, (11) product development feasibility studies, and (12) product implementation. This list of programs shows that while focusing on programmatic research and product development, the Center paid little

attention to implementation² of programs in local schools, let alone their institutionalization.

IGE Developers and the Empirical-Analytical Research Paradigm

During these periods, especially between 1964 and 1972, IGE developers, led by educational psychologist Herbert Klausmeier, operated not only from the RD&D model, but also from the then dominant empirical-analytical research paradigm which assumed that: (1) theory is to be universal, not bound to a specific context or to actual circumstances in which generalizations are formulated; and (2) the statements of science are believed to be independent of the goals and values which people may express within a situation (Popkewitz, 1984, pp. 36-37; Schubert, 1986, pp. 172-173). IGE developers sought universal laws underlying cognitive learning in an effort to find a mechanism to identify efficient methods of learning. By doing so, however, IGE developers failed to appreciate the kind of beings that we are; that is, culturally embedded entities wracked by the unpredictable dynamics of rationality and irrationality, as well as the historical nature of their theories as a socially constructed way of seeing (Kincheloe, 1999, p. 3).

Based upon formal and disinterested research, IGE developers assumed IGE to be a universal model of organizational and curricular procedures that can be applied to any and all traditional public school settings regardless of social contexts, and believed IGE to be a neutral, non-ideological technology capable of reforming all elementary schooling (Popkewitz, Tabachnik, & Wehlage, 1982, pp. 39, 161). Popkewitz, Tabachnik, and Wehlage (1982) found, however, that IGE neither created a universal condition of schooling nor freed schooling from the constraints of different social conditions. Their data uncovered configurations of schooling that responded as much to community and professional interests as they did to students' differing capabilities (Popkewitz et al., 1985, p. 153).

² While I use "implementation" as meaning complicated change processes at the building level, Klausmeier defined "implementation" in simpler terms: "getting the outcomes from research and development activities put to use in the schools" (Klausmeier & Goodson, 1967, p. 4).

Doctoral Studies on IGE Components

While many professors affiliated with the Center conducted projects related to programmatic research and product development, a number of doctoral students associated with the Center, in concert with their professors, contributed to research on refinement of the seven components of the IGE system while IGE was being disseminated and implemented nationwide. The seven components were: the multi-unit school organization, the instructional programming model (IPM), home-school-community relations, facilitative environments, evaluation for educational decision making, curriculum materials compatible with IGE, and continuing research and development. While focused on the first four components, their studies were not so different from those of their mentors in that many of the students operated from the RD&D model and paid little attention to the complexities of IGE implementation. These studies on four components of IGE are reviewed in the following paragraphs.

With respect to the multi-unit school organization, several doctoral studies examined the relationships of organizational factors to effective practices in IGE schools (Howes, 1974; Paul, 1974; Goodridge, 1976; and Heffernan, 1976). Several others dealt with organizational roles and relationships in the multi-unit organizations. Walter (1973) studied the relationship between the overall structure of the school and its adaptativeness in utilizing innovative instructional and learning activities; Herrick (1974) examined the relationship between organizational variables and teacher motivation; and Nelson (1972) studied the organizational structure and student attitudes. Smith (1972) examined the effectiveness of the Instructional Improvement Committee while Sheridan (1974), Evers (1974), Gramenz (1974), and Singe (1974) investigated the effectiveness of the Instruction & Research unit. Other studies of organizational roles and relationship were done by Benka (1972), Strand (1974), White (1974), Bocian (1976), Sigurdson (1976), and Feldman (1976). Holmquist (1976) and Nerlinger (1975) studied decision making in IGE schools.

Nonetheless, very little research dealt directly with the Instructional Programming Model (IPM), even in an exploratory manner. Ironside (1972) found that teachers in IGE schools were able to understand the model for instructional programming, but found it difficult to implement systematically. Klenke (1975) did an exploratory case study of the

IPM and the multi-unit school as they related to home-school-community relations and found that the IPM was not translated into visible and tangible benefits and thus was less successful than the multi-unit school organization. Joyal (1973) compared types of student learning patterns in self-contained and multi-unit schools and found that the multiunit school in Wisconsin provided opportunities for one-to-one, small group, class size and large group activities. Melvin (1976) focused directly on the instructional programming for individual students in the multi-unit school in an exploratory case study (Rebeck, 1977, pp. 123-126).

Niles (1975) studied home-school-community relations as a political process while Klenke (1975) investigated the implementation of the multi-unit school and the IPM as they related to home-school-community relations and found that multi-age grouping and teaming – two characteristics of the multiunit school organization – were translated into visible and tangible benefits and thus were more successful than the IPM and other characteristics of the multiunit school organization. Krupa (1976) and Lake (1976) analyzed home-school-community relations activities in IGE schools. Miles, Bowles and Fruth (1976) documented seven case studies for further conceptual-theoretical analysis and as practical examples of exemplary home-school-community relations (Rebeck, 1977, p. 138).

Research relevant to facilitative environments not already cited includes Howes (1974), who identified change factors related to the institutionalization of the multi-unit elementary school; Paul (1974), who found that linkage among educational agencies was essential for the diffusion of IGE; Goodridge (1975), who found the community of IGE schools to be an important contributor to the external facilitative environment; and Heffernan (1976), who examined personal variables and perceived problems encountered in implementing IGE (Rebeck, 1977, pp. 145-146). Since these doctoral studies were aimed at refining the components of the IGE model, they did not pay much attention to the complicated processes of mobilizing, implementing, and institutionalizing IGE in local schools.

The IGE Change Model

The influence of the RD&D model on IGE developers is also found in their development of a change model. IGE developers conceptualized an ideal process for the adoption and implementation of their innovation. Since 1971, implementation of IGE by the Wisconsin Center was guided by this model consisting of five phases: awareness, commitment, changeover, refinement, and renewal (Heffernan, Mancusi, & Klenke, 1976, p. 13). The first two phases – awareness and commitment – were part of the adoption process; and the remaining three phases – changeover, refinement and renewal – were related to implementation activities. An investigation of the relationships between the user and resource systems implicit in the model revealed that this IGE change model was primarily concerned with the diffusion of an innovation, not the development of one, indicating that IGE developers were operating from the RD&D model when they developed the IGE change model and were apparently not cognizant of the complicated implementation processes (Barrows et al., 1979, p. 31).

Along with this IGE change model, the Center's implementation plan stipulated that the agencies legally responsible for education would be engaged in the implementation efforts. Thus, state education agencies were primarily responsible for helping schools make the changeover to IGE, and chosen teacher education institutions were responsible for holding institutes and developing academic-year, graduate-level programs for experienced IGE personnel, especially principals, unit leaders, and reading staff teachers (Walter et al., 1975, p. 28). This plan led to the establishment of formal state IGE networks in 23 states by late 1974. This state IGE network model was based on the experience of IGE implementation in Wisconsin. However, as this model disseminated, the structures and functions of the network varied greatly state-by-state. This variation often meant that the environments for IGE at the state level were not as supportive as those in Wisconsin. Further, the promotion of IGE by political agencies in power increased the likelihood of IGE adoption. Ironically, however, the involvement of state education agencies decreased the likelihood of effective implementation and continuation of IGE (Fullan & Pomfret, 1977, p. 387).

Studies on IGE Implementation

While IGE was being implemented nationwide, only a few studies examined the change processes of IGE adoption and implementation as compared to the research on components of the IGE system aimed at refining the model. As part of a process evaluation of the nationwide installation of IGE, Ironside (1972, 1973), from the Educational Testing Service, gathered data on the status of IGE implementation as well as the adoption of IGE at the district and school building levels through three separate procedures: a school survey questionnaire, a set of detailed questionnaires, and site visits. First, a school survey questionnaire was administered to principals at a sample of 287 schools and a district questionnaire was completed by personnel from a sample of 112 school districts. Second, a set of detailed questionnaires was administered to a 20% sample of 287 schools. Third, site visits were arranged in 25 randomly selected schools in eight states. Yet, while Ironside's research (1972, 1973) showed the status of IGE implementation, he failed to discuss change processes in depth and factors that supported and inhibited the implementation of IGE.

Later, the Wisconsin Center conducted a four-phase large-scale evaluation study from 1976 to 1979. Phase I was a large sample study (N=159) to provide basic information about IGE schooling. This Phase I study used structural equations to simultaneously examine relationships among the variables believed to influence means of instruction, staff outcomes, and pupil outcomes (Romberg, 1985, p. 46). Phase II site visits to 30 IGE schools (15 high implementation schools and 15 low implementation schools) in 1978 were led by Roderick A. Ironside to verify the self-report data gathered in Phase I, as well as to gather more data on additional variables that determined the processes of schooling. Phase III was an in-depth field study conducted in six exemplary IGE schools, five of which had also participated in Phase I. Phase IV centered on the use and effectiveness of the three primary curricular products developed at the Center: the Wisconsin Design for Reading Skills Development (WDRSD), Developing Mathematical Processes (DMP), and the Pre-Reading Skills Program (PRS) (Romberg, 1985, pp. 46-47).

While focusing on the general status of IGE schools with respect to the seven components of IGE, the Phase I study did not investigate the change processes in

different types of IGE schools. As a validation study, Phase II verified the findings of Phase I and provided an overall picture of IGE implementation in 30 schools, but failed to provide detailed descriptions of factors that supported and inhibited IGE implementation and institutionalization. The Phase III study, conducted by Popkewitz, Tabachnick, and Wehlage (1982), focused on the unique configuration of social, historical, political and ideological factors that make up the school and its social, community context. These factors led IGE schools to revise both the technology of IGE and its espoused goals. However, focusing on assumptions about knowledge, work and professions in IGE, the Phase III study did not provide descriptions of the extent to which the practitioners implemented and institutionalized IGE in different types of schools, or factors that facilitated and hindered these practitioners' efforts.

In 1978, on a smaller scale than the four-phase study, the Center conducted a study exclusively focused on the change processes of IGE adoption – called Studies of Implementation. After USOE discontinued the funding of curricular development on a nationwide basis in 1976 (Schaffarzick & Sykes, 1979, p. 338), the Wisconsin Center's activities were limited to research only. This research-only role was reflected in the six programs during the period 1977-1982, one of which was called Studies of Implementation. The R&D Center's Studies of Implementation project conducted a study of 13 schools – ten Wisconsin and three non-Wisconsin schools – committed to implementing IGE to determine what factors affected the decision to adopt IGE (Barrows et al., 1979). The Studies of Implementation work group originally planned, but could not conduct research on what factors affected the implementation and adaptation of IGE. Unfortunate to those who led the nationwide implementation of IGE, this study was never completed as planned, and began only after the IGE movement had lost its momentum.

Emergence of Curriculum Implementation As An Area of Study

One of the reasons why very few IGE researchers focused on the change process of IGE implementation was because the knowledge base on the change process was not well established at the time. This lack of knowledge was also manifested in a number of doctoral studies that tried to apply change theories to IGE implementation. These studies often cited change theories focused on the adoption phase of innovation: the problem-

solving model, the research, development, and diffusion model, social interaction model, and the linkage model.

As Fullan (1991) notes, only since the 1960s we have come to understand how educational change works in practice (p. 5). While identified as a problem, research on the process of curriculum implementation did not become a major focus of researchers until the late sixties and early seventies. By this time it had become increasingly clear that assessment of planned outcomes was not an adequate way to evaluate many of the innovative programs initiated during this era. As John Goodlad notes, “Often innovations which are thought to have failed really have not; they really were never implemented” (Goodlad, as quoted in Basch and Sliepcevich, 1983, p. 20). Researchers began to question the assumptions that “the move from the drawing board to the school or classroom was unproblematic, that the innovation would be implemented or used more or less as planned, and that the actual use would eventually correspond to planned or intended use” (Fullan and Pomfret, 1977, p. 337). Realizing that once an innovation was adopted, one could not assume that it would be implemented as planned, several researchers defined and measured the degree of implementation while examining organizational change or specific curriculum innovations (see for example, Ashley & Butts, 1971; Berman & Pauly, 1975; Downey & Associates, 1975; Elliot & Adelman, 1974; Evans, Scheffler, 1974; Gross, Giacquinta, & Bernstein, 1971; Hall & Loucks, 1976; Hess & Buckholdt, 1974; Lukas, 1975; Lukas & Wohlleb, 1973; Naumann-Etienne, 1974; Shipman, 1974; Solomon, Ferritor, Heann, & Myers, n.d.). Thus, during the 1970s, curriculum implementation emerged as an area of focus for researchers interested in measuring and understanding school change (Snyder, Bolin, and Zumwalt, 1992, pp. 403-404).

The rationale for initiation of curriculum implementation studies is described in Fullan and Pomfret’s (1977) review of the first decade of research in this area. They suggested the following reasons why such studies became important: (1) to know what has changed, it must be conceptualized and measured directly; (2) to understand why so many proposed educational changes fail, it is necessary to study some of the most problematic aspects to bring about change; (3) to not do so may result in implementation being ignored or being confused with other aspects of change process such as adoption

(the decision to use an innovation); and (4) to interpret learning outcomes and to relate them to possible determinants, it is necessary to examine the implementation of an innovation separately (Fullan & Pomfret, 1977, pp. 336-340). With only one exception (Barrows, Klenke, and Heffernan, 1979), this kind of implementation research had never been an intention of the IGE planners.

Research Perspectives on Curriculum Implementation

While studying the relationship between curriculum theory and practice as a graduate student both in South Korea and the United States, I became interested in the complexities of putting educational ideas into practice: curriculum implementation. There have been three different approaches to the topic by researchers: fidelity, mutual adaptation, and enactment (Snyder et al., 1992). The first approach's "main intent is to determine the degree of implementation of an innovation in terms of the extent to which actual use of the innovation corresponds to intended or planned use and to determine factors which facilitate and inhibit such implementation" (Fullan & Pomfret, 1977, p. 340). Researchers with the second orientation are interested in studying how the innovation is adapted during the implementation process rather than in measuring the degree to which the innovation is implemented as planned. In the third approach, the focus shifts to how curriculum is shaped through the evolving constructs of teachers and students.

Fidelity was the dominant perspective underlying the curriculum implementation research reviewed by Fullan and Pomfret in 1977. Twelve of the 15 studies they reviewed were undertaken from this perspective, while three were oriented toward the emergent perspective at that time, mutual adaptation. Although the authors were clearly sympathetic to the mutual adaptation approach, the fidelity perspective, with its appealing logic, was difficult to escape. In fact, they opened their review using a legislative metaphor to make the point that implementation is a process worth studying on its own right: "If they (the members in charge of implementing the regulatory legislation) respond to influences other than the intentions of the law's advocates, then even the most carefully worded and strongly supported legislation is unlikely to be implemented as planned" (p. 335). Due to the appealing logic, measuring the degree of implementation

became a critical factor in dealing with the seemingly disappointing results of the intervention programs of the sixties (Snyder et al., 1992, p. 404).

On a continuum of research, mutual adaptation represents a mid-point along a line that moves from complete fidelity in implementation of a curriculum to its polar opposite: curriculum enactment, or the ongoing, joint creation of curriculum by students and teachers (Snyder et al., 1992, p. 410). By the 1980s it had become apparent that more was known about how to fail at the implementation of curriculum innovation than about how to succeed. As researchers realized that the actual implementation of an innovation was more akin to bargaining than a straightforward installation of a curriculum model, they attempted to understand failures of fidelity and increasingly came to believe that “change is a process, not an event” (Fullan, 1982, p. 41).

The term “mutual adaptation” emerged from the Rand Study of federally funded programs (change agent projects) headed by researchers Paul Berman and Milbrey McLaughlin. Berman and McLaughlin were interested in studying practices that were based on different assumptions about children, teachers, and learning than those practices studied by fidelity researchers (McLaughlin, 1976). “The very nature of these projects required that implementation be a *mutually adaptive process* between the user and the institutional setting – that specific project goals and methods be made concrete over time by the participants themselves” (McLaughlin, 1976, p. 340).

Study of Facilitating or Inhibiting Factors in Curriculum Implementation

What factors facilitate or inhibit the implementation of a curriculum? This has been a major question for researchers operating from fidelity and mutual adaptation perspectives. The fidelity researcher has tried to discover the factors that maximized faithful implementation, whereas the mutual adaptation researcher has tried to explain what happened to the curriculum in the process of implementation (Snyder et al., 1992, p. 430).

Studies that have examined curriculum implementation have provided us with a great deal of information about factors which support and inhibit implementation. Fullan (1982) identified factors which influence implementation, listing “all those factors on which there is sufficient evidence to warrant generalizing about how and why the

particular factor influences implementation” (p. 55). Many factors were related to characteristics of the change: need and relevance of the change, clarity, complexity, and quality and practicality of program. In addition, Fullan identified a number of local characteristics that are related to: district, community, principal, and teachers as well as such external factors as government and other agencies (1991, p. 68).

Moreover, Fullan (1991) listed factors affecting initiation and continuation of a change program. He included eight variables influencing whether a change gets started: existence and quality of innovations, access to information, advocacy from central administration, teacher advocacy, external change agents, community pressure/support/apathy, new policy-funds (federal/state/local), and problem-solving and bureaucratic orientations (1991, p. 50). Further, Fullan (1991) summarized the factors affecting continuation as active principal leadership, staff development, and district support (pp. 88-89).

Frame of Reference for the Study of IGE

As Fullan (1991) notes, educational change involves two main aspects: what changes to implement (theories of education) and how to implement them (theories of change). The former is related to the values, goals, contents and the consequences associated with specific educational changes, while the latter is related to the dynamics of educational change as a sociopolitical process involving all kinds of individual, classroom, school, local, regional, and national factors at work in interactive ways (Fullan, 1991, p. 5). While keeping in mind that the what and how constantly interact and reshape each other, this study describes both the process of change for IGE and the degree to which the contents of the IGE model were implemented.

In relation to the *change process for IGE*, I rely on both the fidelity and mutual adaptation perspectives as they relate to the study of Individually Guided Education. I first rely on the fidelity perspective in order to identify factors that facilitated and inhibited IGE implementation as well as to describe the degree of implementation of IGE. Also, I rely on the mutual adaptation perspective because the fidelity perspective fails to explain the mutual adaptation occurring in IGE schools. While relying on these two perspectives, I describe four different types of IGE schools by their degree of

implementation: opportunistic, nominal, marginal, and true IGE schools. Also, I describe the three phases of change processes that these schools underwent: mobilization, implementation, and institutionalization.

In relation to the *change contents of IGE*, I rely on the notion of “grammar of schooling” offered by Tyack and Cuban (1995), given that IGE was aimed at replacing the age-graded, self-contained classroom. Tyack and Cuban maintained that the grammar of schooling – age-graded, self-contained classroom, and curriculum divided into subject areas – persisted despite determined efforts to replace it over the 20th century. This notion helps to provide explanations for the disparity between the number of schools that adopted IGE and the number of schools that actually implemented IGE. When I refer to the grammar of schooling in my study, I mean age-graded, self-contained classrooms only.

Standard for Evaluating IGE School Reform

Some people use student achievement scores as the criteria of a school’s success in general and school reforms in particular. IGE developers also used these scores when they claimed that the program was successful. However, I do not use student achievement scores or student attitudes toward the IGE program in discussing success or failure of IGE. According to IGE studies, student achievements in cognitive domains in IGE schools, in general, were either not significantly different from or a little higher than those of non-IGE schools. As to affective domains, IGE students, in general, were more positive than non-IGE students toward the school in the short run with mixed attitudes in the long run. Since the student achievement scores might have been affected by several factors that were not directly related to IGE (e.g., novelty effect and reliability and validity of instruments used,), and student achievement scores might have been obtained from those schools that claimed to be IGE schools but did not implement IGE at all, this study does not use student achievement scores or student attitudes toward the IGE program in discussing success or failure of IGE.

Instead, I make judgments on success or failure based on the degree of IGE implementation. Once I gain information on the degree of implementation, I will be in a better position to interpret learning outcomes and relate them to possible determinants

(Fullan & Pomfret, 1977, p. 336-340). Thus, I use the prototypic IGE model as a standard to describe the degree of adoption, implementation, and institutionalization of IGE (the change contents of IGE). I also identify key factors that explain the success or failure of IGE represented in the decision making on IGE adoption and the degree of implementation and institutionalization in opportunistic, nominal, marginal, and true IGE schools (the change process for IGE).

Chapter 1 Introduction

For over a century and a half, Americans have sought to reform the public schools as a means of improving not just education, but society. They have translated their cultural anxieties and hopes into dramatic demands for educational reform. During the nineteenth century, inspired by a Protestant-republican ideology of turning the United States literally into God's country, educational leaders promoted the public school movement (Tyack & Cuban, 1995, p. 2). In the 1840s Horace Mann was eager to persuade his audience to see the social hell that lay before them if they did not fulfill salvation through the common school (Tyack & Cuban, 1995, p. 1). Mindful of the role that continuous immigration played in the country's political consciousness and frame of mind, educational theorists tried to convert immigrant newcomers and other "outsiders" to individuals who fitted their idealized image of what an "American" should be (Tyack & Cuban, 1995, pp. 1-2). In the early twentieth century (1900-1940), often referred to as the era of "progressive education," reformers sought to make fundamental structural and pedagogical changes in relation to broader currents of social and political progressivism (Cremin, 1961). Educational elites saw themselves as expert social engineers who could perfect the nation by consciously directing the evolution of society. The launching of *Sputnik* by the Soviet Union in 1957 and the civil rights movement sparked a new wave of education reform in the 1950s-60s. When Lyndon B. Johnson sought to build the "Great Society" and declared war on poverty in the 1960s, he claimed that "the answer to all our national problems comes down to a single word: education" (Perkinson, 1991, p. ??). In 1983, a presidential commission delivered another fire-and-brimstone sermon about education, *A Nation at Risk*, though its definition of problem (economic decline) differed from Mann's (moral dissolution) (Tyack & Cuban, 1995, p. 2). This sermon was followed by state-driven reforms of the 1980s. Then the 1990s witnessed the press for standards-based education evidenced by the efforts of federal and state legislators, presidential and gubernatorial candidates, teachers and subject matter specialists, councils, governmental agencies, and private foundations (Glaser & Linn, 1993, p. xiii).

How significant, sincere, and sacred the claim, rhetoric, and sermon on education reform may be, the implementation of particular reforms took time and moved in mysterious ways, more like a Slinky Toy than like a piston (Johnson, 1990, pp. 127, 125-151). The relationships between policy talk and institutional practices have been complicated and equivocal (Tyack & Cuban, 1995, p. 54).

Sometimes extravagant policy talk led to minimal, but symbolically significant, implementation. Reformers often approached the schools carrying blueprints for social salvation, and grandiose plans to solve social problems. Educators often complied with such outside demands to set society straight by adopting the reform, but then pushing it to the edge of the school. School leaders could then claim that they were doing their part to save the family and suppress sin and disease, but they did so without much altering the core activities of the school (Tyack & Cuban, 1995, pp. 54-55).

Some proposed innovations took hold rapidly. Major changes have sometimes occurred in relative silence. Minor changes, once deliberate reforms, have often become so pervasive as to be taken for granted and no longer perceived as reforms (Tyack & Cuban, 1995, p. 54). Indoor plumbing, central heating, and blackboards are such examples. How trivial they may seem, not long ago they were high on the agenda of necessary reforms (Tyack & Cuban, 1995, p. 54).

The history of the twentieth-century American school reform bestowed on us a valuable lesson that a new school reform program is subject to modification and can be used to legitimize, rather than change, what is called “the grammar of schooling,” i.e., established institutional patterns (Tyack & Cuban, 1995; Tyack & Tobin, 1994). The grammar of schooling, Tyack and Cuban note, is the result of previous reforms that had, and continue to have a strong foundation in the social expectations about schooling held both by educators and by the general public. The grammar of schooling is shaped largely by the unique organizational characteristics of tax-supported public bureaucracy governed by lay policy-makers (Cuban, 1992). To be viewed as worthy of continued endorsement, school districts often adopt innovations. At the same time, responsible for maintaining order, instructing the young, and producing students who have “learned,” the district has a bureaucracy to coordinate and control what occurs in classrooms and elsewhere by, for example, ensuring that staff meet state and local criteria for

employment and that schools meet legal requirements for spending state and federal funds (Cuban, 1992; Elmore and McLaughlin, 1988; Meyer and Rowan, 1978).

The tight coupling loosens considerably when it comes to classroom instruction that is characterized as a mix of art and science subject to improvisation and unpredictability in outcomes. Teachers have devised a practical pedagogy to cope with the unique nature of the classroom and its imperatives that often goes uninspected by either district administrators or policymakers (Bidwell, 1965; Cuban, 1992; Meyer and Rowan, 1978). The decoupling of instruction from administration and policy making achieves autonomy and isolation that teachers find satisfying. There are limits, of course, on how much and how far teachers can change what occurs in the classroom: choice is situationally constrained. The margin of freedom that teachers enjoy within the limits of their “situationally constrained choice” may be small, but it has made teachers gatekeepers for any pedagogical reforms (Cuban, 1993). Thus, major school reform efforts to alter classroom teaching often resulted in modest shifts in pedagogy in elementary and high schools over the last century (Cuban, 1993).

Conceptual Framework

Berman and McLaughlin (1978) conceptualized the local process of change as consisting of three phases of innovation: mobilization, implementation, and institutionalization (pp. 9-21). They also identified patterns, processes, and paths in these phases. In the mobilization phase, four patterns of support were found that depended on which components of the school districts were mobilized: (1) opportunism, (2) top-down support, (3) localized support, and (4) broad-based support. They explained these patterns of support:

1. Opportunism represents the lack of effective support from both central office and the project staff. Adopted to respond to political demands, or to acquire essentially “soft” federal money with few strings, opportunistic projects were invariably ancillary to the district’s main educational priorities, they fulfilled their purpose simply by virtue of their adoption.
2. Top-down support describes the situation in which the central office staff genuinely sought to improve educational practices but failed to mobilize the support of school staff.
3. Localized support developed because the enthusiasm and efforts of “grass roots” staff (usually in one school) were not matched at the central office level. Though a school might have planned quite extensively for these projects, districts paid little attention to them beyond routine assistance from the federal programs manager.

4. Broad-based support is the situation in which all levels of the district backed the project. In this instance, the adopted project was seen as addressing a central educational need of the district, and active steps were taken to generate support from principal actors at all levels in the school system. (Berman & McLaughlin, 1978, p. 15)

In the implementation phase, Berman & McLaughlin (1978) identified three processes, defined by the extent to which adaptation occurred in the project and its institutional setting: (1) nonimplementation, (2) cooptation, and (3) mutual adaptation (p. 16). They elaborated on these processes:

1. Nonimplementation occurred when the project neither altered its setting nor was adapted to it.
2. Cooptation occurred where the staff adapted the project, usually emasculating it, to meet their own needs, without any corresponding change in traditional institutional behavior or practices.
3. Mutual adaptation occurred when both project and setting were changed. Mutual adaptation could involve a variety of adjustments to the project itself – for example, reduction or modification of idealistic project goals, amendment or simplification of project treatment, downward revision of ambitious expectations for behavioral change in the staff or of overly optimistic effects of the project on objectives, and so on. (Berman & McLaughlin, 1978, p. 16)

In the institutionalization phase, four paths were identified by Berman & McLaughlin (1978): (1) discontinuation, (2) isolated continuation, (3) *pro forma* continuation, and (4) institutionalized change (pp. 19-20). They provided detailed explanations of these paths:

1. Discontinuation occurred when neither district officials nor building-level staff chose to continue project operations in any form after the end of federal funding.
2. Isolated continuation occurred when district officials did not actively or explicitly turn the project off, but rather supported it inadequately if at all; despite a lack of support from the district; however, the project methods or materials were continued – essentially in isolation from other schools – by those project staff who had assimilated project strategies and chose to integrate them into their classroom practices.
3. *Pro forma* continuation occurred when the district established the innovation or some aspect of it as official policy, but teachers did not use the project very extensively in their classrooms. In some cases, school staff simply did not employ project precepts; in others, project methods or materials were “continued” only in a ritualistic sense.
4. Institutionalized change occurred when project-related change became part of the standard educational repertoire at both the district and classroom levels. (Berman & McLaughlin, 1978, pp. 19-20)

The diagram below clarifies the linkage between the three phases of innovation identified by Berman and McLaughlin as shown in Figure 1.1 (1978, p. 17).

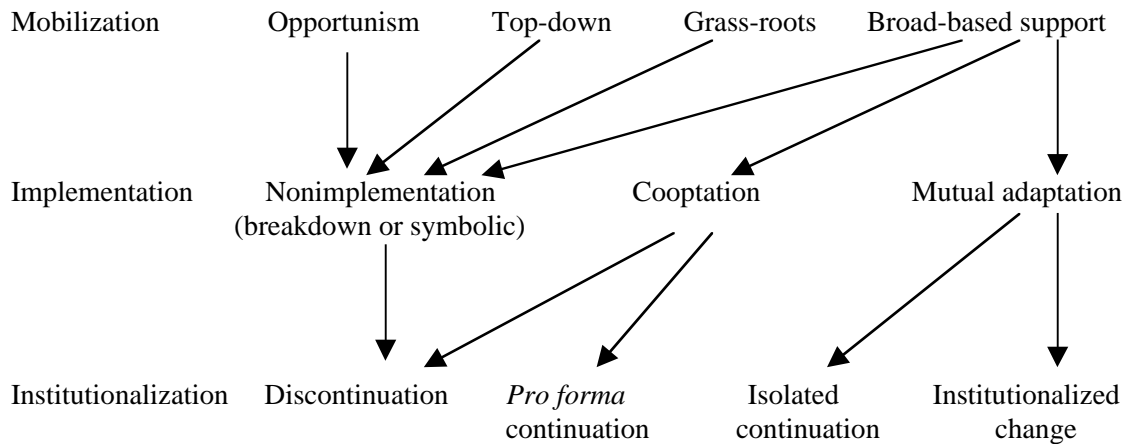


Figure 1.1. The Paths of Innovation

Source: from Federal Programs Supporting Educational Change, Vol. VIII: Implementing and Sustaining Innovations (R-1589/8-HEW; p. 17), by P. Berman, & M. W. McLaughlin, 1978, Santa Monica, CA: Rand Corporation.

Also, in an attempt to explain how educational change works, Michael Fullan (1991) summarized three broad phases to the change process. Phase I – variously called initiation, mobilization, or adoption – consists of the process that leads up to and involves a decision to adopt or proceed with a change. Phase II – implementation or initial use (generally the first two or three years of use) – includes the initial experiences of efforts to put an idea or reform into practice. Phase III – differently labeled continuation, incorporation, routinization, or institutionalization – refers to whether change gets built in as an ongoing part of the system or disappears through a decision to discard or by way of attrition. Figure 1.2 displays the three phases with the concept of outcome added to provide a more complete overview of the change process (Fullan, 1991, p. 48).

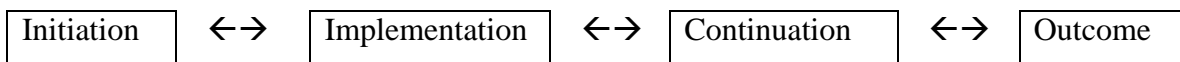


Figure 1.2. A Simplified Overview of the Change Process

Source: from The New Meaning of Educational Change (2nd ed.) (p. 48), by M. Fullan, 1991, New York: Teachers College Press.

Further, Fullan (1991) listed factors affecting initiation, implementation, and continuation. He included eight variables influencing whether a change gets started:

existence and quality of innovations, access to information, advocacy from central administration, teacher advocacy, external change agents, community pressure/support/apathy, new policy-funds (federal/state/local), and problem-solving and bureaucratic orientations (1991, p. 50). The key factors affecting actual use of innovation are categorized into three groups: characteristics of change, local characteristics, and external factors. Characteristics of change include: need, clarity, complexity, and quality/practicality. Local characteristics are related to: district, community, principal, and teacher, while external factors include government and other agencies (Fullan, 1991, p. 68). Fullan (1991) summarized the factors affecting continuation as active principal leadership, staff development, and district support (pp. 88-89).

The Program: The Seven-Component IGE System

Relying on the above conceptual frameworks, this study explores one educational reform effort which extended over a period of a decade and a half, beginning in 1965; i.e., Individually Guided Education (IGE). With the purpose of producing higher educational achievements by providing for differences among students in rate of learning, learning style, and other characteristics, IGE planners at two institutes, the Wisconsin Research and Development Center for Cognitive Learning (the Center, or R&D Center, or Wisconsin Center, hereafter) at the University of Wisconsin-Madison, and the Institute for the Development of Educational Activities, Inc. (/I/D/E/A/), an educational affiliate of the Charles F. Kettering Foundation, developed a seven-component model (or 35 goals/outcomes for /I/D/E/A/'s IGE model) by the early 1970s which would create a new web of institutional relationships for students, teachers, and administrators (Popkewitz et al., 1982). The IGE system, consisting of seven components, was aimed at replacing the total-class-oriented, didactic procedures of instruction in the age-graded, self-contained classroom with team teaching, differentiated staffing, shared decision-making, individualization by instructional programming (preassessment, continuous progress, criterion-referenced assessment), various grouping modes (small and large groups), multi-age grouping and non-gradedness often in an open space setting (Klausmeier et al., 1977).

This study omits the history of /I/D/E/A/ in the IGE movement in large part because of the focus of study and in part because of the limited data related to the involvement of /I/D/E/A/ in the IGE movement. Thus, the following description is focused on the program developed by the Wisconsin R&D Center.¹ Specifically, the following condensation of the seven components of IGE is largely derived from Individually Guided Education and the Multiunit Elementary School by Klausmeier, Quilling, Sorenson, Way, and Glasrud, (1971, pp. 15-30), as well as Walter (1975). Given the purpose of this study that will be described later in this chapter, MUSE and IPM are described in more detail than the other five components.

The Multi-unit School-Elementary (MUS-E). The MUSE was designed to provide an environment in which instructional programming and the other components of IGE could be introduced and refined. It was a creation of organizational arrangements that had evolved since 1965 from a synthesis of theory and practice concerning “instructional programming for the individual students, horizontal and vertical organization for instruction, role differentiation, shared decision-making by groups, open communication, and administrative and instructional accountability” (Klausmeier et al., 1971b, p. 20).

Figure 1.3 shows the prototype organization of a MUSE of 400-600 students. Variations from the prototype would be made in view of the number of enrolled students in the building, the availability of noncertified personnel, the size of the school district, and so on. The organizational structure would consist of interrelated parties at three different levels of operation: the I&R unit at the classroom level, the IIC at the building level, and the SPC or a comparable administrative organization at the district level. Each of the first two levels would be itself a hierarchical arrangement with unequivocally defined roles for personnel. Personnel serving at each of two levels would provide the communication link (Klausmeier et al., 1971b, p. 20). At the classroom level in the MUSE, one would find the non-graded Instruction and Research (I&R) unit that replaced the age-graded, self-contained classroom. A typical I&R unit would include the following personnel: “a unit leader, two or three staff teachers, a first-year teacher or resident

¹ /I/D/E/A/'s version of IGE also had seven major components or Outcome Clusters as they were called: School Decisions, Unit Organization, Unit Planning and Improvement, The Learning Program, Student Responsibilities, Relationships, and Adoption & Implementation (Fleury, 1993, pp. 218-220).

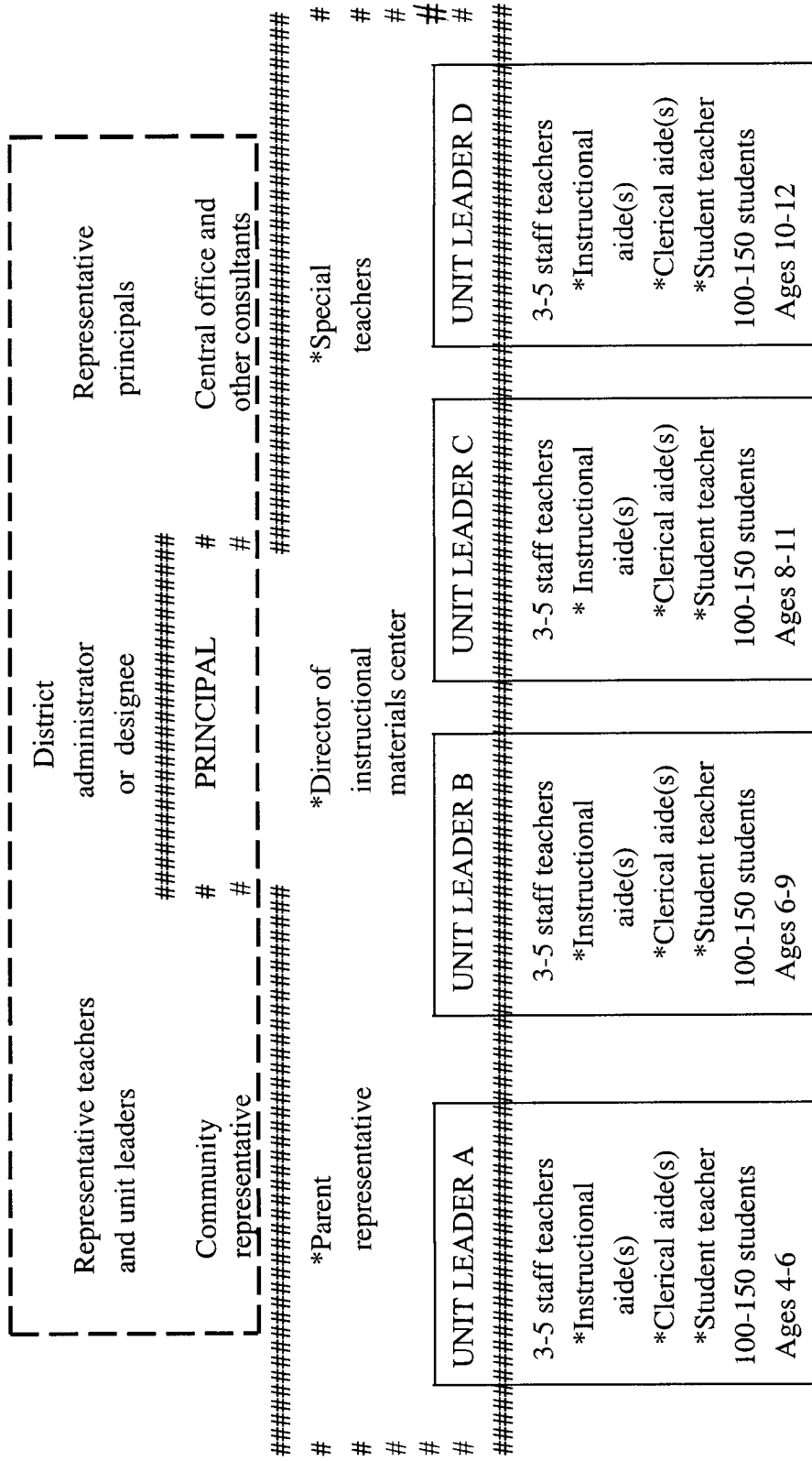


Figure 1.3. The Multiunit Organization
 Source: from *Individually Guided Elementary Education: Concepts and Practices*, by H. J. Klausmeier, R. A. Rossmiller, & M. Saily (Eds.) (p. 12), 1977, New York: Academic Press.
 _____ Instruction and Research Unit;
 ##### Instructional Improvement Committee;
 --- Systemwide Program Committee.
 *Inclusion of these persons will vary according to particular school settings.

teacher, an instructional secretary, an intern, and 100-150 students” (Klausmeier et al., 1971b, p. 8). The major functions of the I&R unit would be: “(1) to plan, carry out, and evaluate instructional programs for each student in the unit; (2) to engage in continuous inservice staff development activities; (3) to provide preservice teacher education activities; and (4) to plan and conduct cooperatively, often with other agencies, a systematic program of research and development” (Klausmeier et al., 1971b, p. 22; Walter et al., 1975, p. 8).

At the second organizational level, the building level, would be the Instructional Improvement Committee (IIC). The IIC would consist of the principal and the unit leaders (Klausmeier et al., 1971b, p. 22). The four major functions of the IIC would be: “(1) stating the general educational objectives and outlining the educational program for the entire school building; (2) interpreting and implementing system-wide and statewide policies that affect the educational program of the building; (3) coordinating the activities of the I&R units to achieve continuity in all curricular areas; and (4) arranging for the use of the time, facilities, and resources that are not managed independently by the units” (Klausmeier et al., 1971b, p. 22; Walter et al., 1975, p. 8). The IIC, thus, would deal typically with planning and coordinating functions related to instruction (Klausmeier et al., 1971b, p. 22).

The System-wide Program Committee (SPC) would be at the third or system level of the organizational structure. The SPC was developed to expedite the transition from the age-graded, self-contained organization to the organizations of the I&R unit and the IIC. The SPC would be chaired by the school superintendent or his designee and involve consultants and other central office staff, representative principals, unit leaders, and teachers (Klausmeier et al., 1971b, p. 22).

The four decision-making and facilitative responsibilities for which the SPC takes initiative would be: “(1) identifying the functions to be performed in each MUSE of the district; (2) recruiting personnel for each MUSE and arranging for their inservice education; (3) providing instructional materials; and (4) disseminating relevant information within the district and community” (Klausmeier et al., 1971b, p. 22; Walter et al., 1975, p. 8). A central office organization other than an SPC might be responsible

for these functions; and considerable flexibility would be required, since local school districts varied greatly in size and other characteristics (Klausmeier et al., 1971b, p. 22).

The Instructional Programming Model (IPM). At the center of the IGE system is the Instructional Programming Model (IPM) for the individual student. This model takes into consideration “the beginning level of performance, rate of progress, style of learning, motivational level, and other characteristics of each pupil in the context of the educational program of the school” (Walter et al., 1975, p. 8). Instructional programming for the individual student should be properly planned and implemented in the cognitive, psychomotor, and affective realms. It could be used either with categorically stated instructional objectives that enumerate mastery, or with emphatic and broad objectives that imply activities to be completed or progress to be made. The model displayed in Figure 1.4 was also utilized by R&D Center teams in developing curriculum materials and by school staff in implementing IGE. Until 1971, it had been implemented most broadly in schools that had utilized the Word Attack component of the Wisconsin Design for Reading Skill Development (Klausmeier et al., 1971b, p. 17, 25; Walter et al., 1975, pp. 8-10).

Curriculum Materials. The objectives of IGE and the nature of its instructional programming demanded that high quality, tested curriculum materials be available to local schools. Materials would be chosen and purchased in order to achieve particular objectives (Klausmeier et al., 1971b, p. 27). Local school districts were encouraged to go through the following general procedures for identifying and utilizing instructional materials. First, educational objectives would be stated. Next, a representative system-wide committee would identify “possible printed material – textbooks, supplementary textbooks, programmed material, library books, and unit material, as well as audiovisual material – sound motion pictures, sound tapes, videotapes, slides recordings, etc.” (Klausmeier et al., 1971b, p. 27). Self-contained multi-media instructional packages would also be included. From this system-wide list, the building staff would choose appropriate materials for each student to achieve stated instructional objectives. Either the system or building committee would “key” materials to objectives. Particular materials related to each curriculum area would then be made available, and missing materials would be developed locally (Klausmeier et al., 1971b, p. 27). Local districts also could

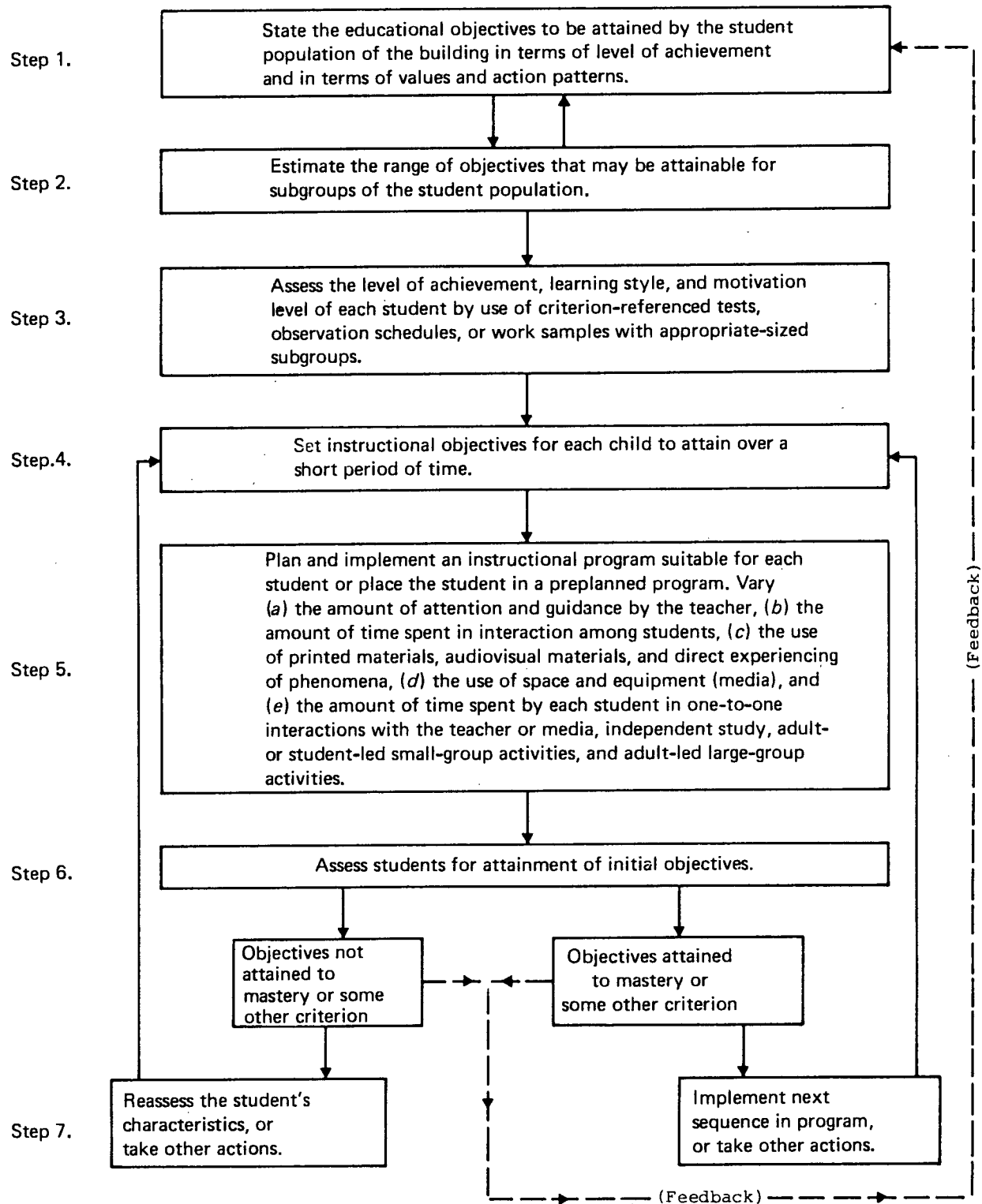


Figure 1.4. Instructional Programming Model in IGE

Source: from *Individually Guided Elementary Education: Concepts and practices*, by H.J. Klausmeier, R. A. Rossmiller, M. Saily (Eds.) (p. 16), 1977, New York: Academic Press.

utilize Center-developed curricular and instructional materials that were suitable for use in IGE and other schools such as: the Wisconsin Design for Reading Skill Development (WDRSD), Individually guided Motivation (IGM), Developing Mathematical Processes (DMP), and the Pre-Reading Skills Program (PRS) (Walter et al., 1975, p. 10).

Measurement and Evaluation for Educational Decision Making. The information gained from assessing students' characteristics and achievements would be input to decision-making, communication, and accountability processes. Criterion-referenced exams, worksheet samples, and observations of student behaviors would be used comprehensively to: "(1) assess the child's entry behaviors or readiness in each set of learning tasks so that a tentative instructional program might be planned and initiated; (2) assess each child's progress; (3) furnish illuminating feedback to the child; (4) give information to the teacher for keeping track of student progress; (5) assess and refine the total IGE design and its different components" (Klausmeier et al., 1971b, p. 28). Norm-referenced exams might also be utilized to acquire information about a child's abilities and achievements of a broader nature. The student's degree of motivation and the learning style would be identified principally through observation. A conference between a teacher and a child would help to identify the child's particular objectives (Klausmeier et al., 1971b, p. 28).

Home-School Communications. Home and neighborhood characteristics would be given great attention in conjunction with the entry behaviors and other characteristics of each child. Unit leaders and teachers would develop a comprehensive program of parent-school, teacher-home visits. Reporting would involve teacher, parent, and child. Aides would be selected from the neighborhood. Parents would be brought periodically into IIC and unit meetings to communicate information, values, and feelings (Klausmeier et al., 1971b, p. 28).

This component would be renamed as Home-School-Community Relations during 1970s. This renamed component had three broad aims: (1) for the staff to be aware of available resources and be responsive to the educational expectations of the community, parents, and students; (2) for the community, parents, and students to be aware of and responsive to the requirements for implementing IGE; and (3) for both staff and community to be involved in the changeover and refinement of IGE (Lipham & Fruth,

1976). The program of home-school-community relations would operate at three interdependent levels: the school district level, the local school building level, and the instructional level (Klausmeier, 1977, p. 19).

Facilitative Environments. The change to IGE often required that existing school facilities be remodeled or that projected facilities be planned to provide maximum flexibility in learning spaces, providing a more facilitative environment than that of the conventional school. Moreover, to maximize instructional effectiveness, systematic planning, budgeting, and evaluation related to spaces, equipment, and materials would be required (Klausmeier et al., 1977, p. 20). Several inservice and on-campus educational programs were needed so that school personnel could generate a facilitative environment for IGE. In turn, planning and implementation of these educational programs would alter the milieu of teacher education institutions and state educational agencies. Both were required to prepare school personnel for roles that had not been completely defined in IGE schools (Klausmeier et al., 1971b, pp. 28-29).

This component of facilitative environments was further developed and conceptualized into one having two types, i.e., intra-organizational and extra-organizational facilitative environments, through the refinement of overall program activities during 1970s. The intra-organizational facilitative environments would be represented in the multi-unit organizational structure. The extra-organizational facilitative environments would be represented in (1) the state IGE network consisting of the State IGE Coordinating Council, the Regional IGE Coordinating Council, the System-wide Program Committee, and teacher education institutions, and (2) the national level facilitative environments such as the Association for Individually Guided Education (AIGE) and multi-state IGE institutes (Klausmeier, 1977, pp. 20-22; Walter, 1975, pp. 21-23; Walter, 1976, pp. 70-74).

Continuing Research and Development. By the early 1970s, many practitioners and theoreticians had contributed their finest ideas to the design and subsequent practice of IGE, yet only a modest beginning had been made nationally. In response to this situation, Klausmeier decided that further development and development-based research on all components of IGE, particularly on the organization for instruction and the related administrative arrangement in the local school and central office, were required. Local

school districts, state educational agencies, the R&D Center, and other agencies were expected to continue to participate in this type of effort. Continuing basic research on learning and instruction in school settings was also needed, he felt, in order to generate knowledge that would make possible improved second generation components or possibly a new and different design (Klausmeier et al., 1971b, p. 29).

The Purpose of Study and Research Questions

The general purpose of this study is to explore the phases of development, mobilization, implementation, and institutionalization of MUSE and IPM aimed at replacing the age-graded, self-contained classroom, 1965-1981. In fulfilling this purpose, the unit of analysis is the school building where the principal and staff were engaged in changeover to IGE. Specifically, the following questions are investigated:

1. How were MUSE and IPM developed and disseminated nationwide?
2. How and to what degree were the specific organizational and instructional arrangements of MUSE and IPM adopted, implemented, and continued by school personnel nationwide?
3. What factors influenced the degree and processes of adoption, implementation and continuation of the IGE reform program?

The Scope of Study

The scope of this study is constrained by its focus: the core of schooling, or organizational regularities, structures, rules, and practices that organize the work of instruction and teaching practices at the classroom level. Due to this focus on organizational and related instructional arrangements (the grammar of schooling), attention is paid to two major components of the IGE system: the Multi-unit school organization and the Instructional Programming Model. The centrality of these two components in the IGE system elevates the significance of this study as an IGE history. Three other components of the IGE system – compatible curriculum materials, evaluation for decision making, and the facilitative environments – are mildly dealt with, while the other two components of the IGE system – Home-School-Community relations, and continuing research and development – will be considered the least.

Further, since my study focuses on the nationwide mobilization, implementation, and institutionalization of MUSE/IPM, 1965-1981, this history does not deal with the implementation and institutionalization of MUSE/IPM during the period after 1983. Also, since this study deals with IGE in the United States, IGE abroad is not part of the story in this study.

The Limitation of Study

This study is concerned with the core of schooling, or organizational regularities, structures, rules, and practices; thus this investigation does not deal with student achievement scores or the effectiveness or relative value of either approach (traditional organization vs. IGE) in achieving desirable outcomes. Since this study considers vital the reform-practitioner interaction (Tyack & Cuban, 1995, p. 61), it may be hard to determine to what extent the student outcomes are attributable to an innovation. Added to this problem are the difficulty in determining the short- and long-range student outcomes and the issue of appropriateness of testing instruments. On the other hand, this study excludes judgments about the effectiveness of either the total-class-oriented, didactic procedures of instruction in the age-graded, self-contained classroom or the individualized instruction in the multi-unit organization. This inquiry assumes that instances of effective teaching, however defined by scholars or practitioners, take place within both approaches. This study also excludes descriptions of the emotional climate in classrooms and informal relationships between teachers and students. The central research issue for this study is to investigate how stable certain organizational patterns and teaching behaviors were in the face of mighty efforts to move school organization and instruction toward the multi-unit organization and individualized instruction (Cuban, 1993, p. 9).

In addition, this study focuses on both the collective and individual meanings of change, rather than exclusively emphasizing individual meaning making of change. While dealing with both the broader organizational forces influencing change (MUSE/IPM) and personal needs/dispositions and understandings, this study is somewhat lacking in exploring the phenomenology of change – how people actually experience change as distinct from how it might have been intended. Thus, despite Fullan's (1991)

statement that “The interface between individual and collective meaning and action in everyday situations is where change stands and falls” (p. 5), this study omits, to a certain extent, such important daily realities of teachers that make change difficult, if not impossible, to happen.

Historical Case Study as Research Method

This research as a historical case study is concerned with understanding the wholeness of experience, for historical inquiry seeks to reconstruct as closely as possible the past as earlier participants experienced and understood it. The context of historical inquiry, however, is not only the past, but the present as well because written history communicates what historians think they know about the past. In addition, while seeking to interpret and explain the significance of past experiences, historians seek an understanding not only of what contemporaries saw and understood but also of those things that contemporaries could not or chose not to see. Interpretation involves judgment, but the type of judgments central to historical interpretations are ones that seek to explain how things could have happened—not whether they were good or bad (Edson, 1988).

Data Collection

To collect historical documents for a history of IGE, I have used the Penn State University libraries and have visited the archives at the Wisconsin Research and Development Center. The following are major primary source materials among those that I have obtained to date: records and reports of the United States Office of Education, the National Institute of Education, and state departments of education; Quarterly/Semi-annual/Annual Progress Reports on the Center, Project Plan and Budget Requests, Memoranda of Agreement with States, agendas for leadership development conferences and workshops, Theoretical/ Technical Reports, Working Papers, the five-phase evaluation reports, manuals for IGE implementation, IGE inservice training materials, and curricular materials published at the Center; memoranda within and correspondence between the Center and other agencies; lists of inservice/preservice IGE courses; evaluation reports on nationwide installation of IGE by the Educational Testing Service;

newsletters by the Center; documents by superintendents, principals, and school boards; more than 120 doctoral dissertations at 37 colleges and universities in 23 states; and ERIC documents. Included also in primary sources are written interviews with IGE creators. Secondary data and documents that I employed selectively when necessary include books, journal articles, newspaper articles, transcripts from radio programs, and other materials regarding IGE program development and implementation.

Data Analysis

To all gathered data and documents I applied external and internal criticisms in order to derive historical evidence. External criticism determines the authenticity of the source while internal criticism determines the credibility of the facts stated by the source (McMillan and Schumacher, 2001). With the help of numerous faculty from several departments and colleges at the Penn State University, I ascertained the facts, asked interpretative questions about how these historical events occurred and their reasons, and moved to stating generalizations. In investigating and analyzing the past events around the IGE reform movement, the writer was interested not only in explaining IGE as an education reform, but also in explaining it as unique and different from other education reforms.

Also, relying on naturalistic modes of data analysis, I first read and reread the data to get a sense of their scope and to check for emerging themes or patterns. This activity was accompanied by copious note-taking, in which my observations, hunches, and ideas were captured. This step led to the development of categories that could be applied as an organizing scheme to the data. The next step was “unitizing” the data, i.e., dividing them into the smallest pieces of information about something that could stand by itself. Then, the categories were applied to the segments of data, which is called coding. Meanwhile, the organizing system was refined: the categories were renamed, modified in content, subdivided, discarded, or supplemented by new ones. Then, the final application of the categories to the data segments followed to seek configuration describing their content and linkages across categories. These linkages led to final interpretations of the history of IGE reform efforts, 1965-1981.

The Significance of Study

First, this study integrates extensive data on IGE history focusing on the responses of school personnel to the reform. Thus, this research provides a new, comprehensive understanding of the key factors at the school building level that either facilitated or hindered the processes of adopting, implementing, and institutionalizing a reform program of the size of IGE. This understanding of the key factors may help contemporary practitioners set up realistic goals in transforming their schools and produce effective strategies to achieve the goals.

Second, this study helps to enhance our understanding of the dynamics between external supporting agencies and school-based practitioners surrounding a comprehensive nationally-established reform program such as IGE in which governmental agencies, state/local education agencies, districts, school boards, administrators, and practitioners were involved. This understanding can help in refining theories of change vis-à-vis the nature of school organizations, in that this study reveals the complicated interplays between the established bureaucratic activities and an extensive school reform program aimed at replacing the traditional age-graded, self-contained classroom with the organization.

Third, this study can help policy makers to refine their prescriptive visions of school reform, since reform visions rely upon a view of the past. Especially, this study of IGE has implications for public school innovation policy at the national, state, and local levels, implications for implementing the current standards-based education reform programs, and implications for inservice/preservice teacher education programs with respect to the standards-based education.

Key Factors in Mobilization, Implementation, and Institutionalization of MUSE/IPM

Within the history of IGE, several different key factors either facilitated or hindered the processes of mobilizing, implementing, and institutionalizing IGE as summarized in Table 1.1. Each factor within each phase helps to explain the degrees and processes of innovation in different types of schools: nominal, marginal, and true IGE schools.

Table 1.1. Key Factors in the Phases of IGE Innovation

Phase	Key Factors
Mobilization	Locus of decision, need for a change, readiness, and resources
Implementation	Staff development, role relationship change, shared decision-making, and district support
Institutionalization	External support, creative modification, and continued inservice

The Phase of Mobilization

In the history of IGE, four factors played a major role in the adoption phase in relation to the eventual implementation of MUSE/IPM: locus of decision, need for a change, readiness, and resources. According to the data, the first factor, “locus of decision,” had more to do with the district administration that made the decision on the adoption of MUSE/IPM than grass-roots staff. This top-down nature of decision making in the majority of school districts that adopted IGE was related to the fact that the major impetus for IGE adoption came from a federal government agency, i.e., the United States Office of Education (USOE). After the USOE awarded the Wisconsin R&D Center a grant to accomplish four phases of the nationwide installation effort, the Center established subcontractual relationships with state education agencies in nine states in 1971 to start 20-50 MUSE/IPM schools. In turn, state education agencies made a contract with school districts; and in turn, the central office administration, either alone or with a principal, made a decision to transform a traditional school into an IGE school.

Thus, after the political decision to select IGE for nationwide dissemination was taken, the focus of the grantee was on obtaining as many adoptions as planned for in as short a time as possible. As a result, the decision to adopt IGE was more or less beyond the control of the staff in the majority of IGE schools. The staff of only a small number of schools who perceived a need for an innovation participated in the IGE adoption decision and appeared committed to the initiating process. Due to this politicized mobilization, IGE was adopted for symbolic or opportunistic reasons in a number of schools. Although hard to determine, it was estimated that between 62 and 87 (22% to 30%) of 287 IGE schools fell into this category because these schools were known to have adopted IGE, but did not implement MUSE/IPM at all (Ironsides, 1972, p. 14).

Unlike many other federally funded programs that paid less attention to the phase of implementation, however, several types of training opportunities for the

implementation of MUSE/IPM were sponsored by the Wisconsin R&D Center, state education agencies, teacher education institutions, and school districts during 1971-72. These opportunities included: the train chain (national overview, state conference, local commitment, school leader training, and local staff training), specific workshops and institutes, and activities that schools, districts, or Leagues arranged. These extensive training opportunities provided reform-minded schools with the basis for mobilizing people and resources toward the implementation of MUSE/IPM.

The remaining three mobilizing factors – “need for a change,” “readiness,” and “resources” – pertained more to the staff at the building level than those at the central office. The staff in IGE schools that would either co-opt or discontinue MUSE/IPM during implementation or institutionalization had not been looking for an alternative to traditional education. Further, most of the staff were not involved in the decision to adopt IGE since the decision was made at a higher level. Not surprisingly, feeling no need for change, the staff was uninterested in training opportunities for the initiation of IGE. Moreover, the unsuccessful IGE schools acquired few IGE materials, had inadequate facilities for or did not utilize facilities in tune with IGE, and rarely called upon external support resources for initiation training. Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), more than 40% of 287 schools fell into this category. A school in this category would be called a “nominal” IGE school¹ in the phases of implementation and continuation (Romberg, 1985).

The staff of another group of IGE schools that would either co-opt or discontinue MUSE/IPM during implementation or institutionalization was similar to the above group of IGE schools. They had not been looking for an alternative to traditional education and were not involved in the decision to adopt IGE since the decision was made administratively. Unlike the staff of the above nominal IGE schools, however, at least part of the staff of this group became interested in IGE because of the opportunities they

¹ An evaluation study conducted in 1977 by the Wisconsin R&D Center classified a total of 159 IGE schools into three groups by the degree of implementation of IGE: nominal, marginal, and true IGE schools. The evaluation team found that nominal IGE schools (60% of 159) seemingly liked some of the ideas about IGE and wanted to be identified with the concepts, but failed to make the substantial organizational and instructional changes which reflect IGE (Romberg, 1985, p. 72).

saw for students. Frequently encouraged by the principal and supported by the central office, these schools acquired IGE materials, sometimes transformed traditional facilities into those in tune with IGE, called upon external support resources for initiation training, cooperated with team members in initiating MUSE/IPM, and incorporated some elements of MUSE/IPM into their curriculum and teaching practices. However, less than 20% of 287 schools fell into this category (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972). A school in this category would be called a “marginal” IGE school² in the phases of implementation and continuation (Romberg, 1985).

In contrast to the above characterizations, a majority of the staff in IGE schools that would successfully implement and institutionalize MUSE/IPM had been looking for an alternative to traditional education, made a joint decision to initiate IGE, and often displayed a willingness to work extra hours and cooperatively in adopting the program (Ironside & Conaway, 1979, p. 42). In these schools, the adoption decision was shared by the principal and staff; they accumulated IGE materials; they arranged for open space and had a library/IMC available for the purpose of IGE-related instruction; and they called on such opportunities as consultants, site visits, and several types of training for initiation. According to the research (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), less than 20% of 287 schools fell into this category. A school in this category would be called a “true or actual” IGE school³ in the phases of implementation and continuation (Romberg, 1985).

The Phase of Implementation

As Fullan (1991) put, “a large part of the problem of educational change may be less a question of dogmatic resistance and bad intentions and more a question of the

² The same evaluation study mentioned in footnote 2 found that marginal IGE schools (20% of 159) were reorganizing their staffs by forming units, sharing decision making, and making efforts to change the pattern of instruction in their schools, but encountered several problems in forming units, setting objectives, obtaining district/parental support, and so forth; they were not yet IGE but they were no longer a traditional school. A low marginal IGE school was characterized by a less degree of implementation than a high marginal IGE school (Romberg, 1985, pp. 71-72).

³ The same study mentioned in footnotes 3 and 4 found that nearly one-quarter of the schools (24% of 159) that called themselves IGE were reorganizing their staffs by forming units, sharing decision making, and making efforts to change the pattern of instruction in their schools (Romberg, 1985, p. 72).

difficulties related to planning and coordinating a multi-level social process involving thousands of people” (p. 65). Four key factors facilitated or hindered the processes of implementing MUSE/IPM in successful and less successful IGE schools: staff development, role relationship change, shared decision-making, and district support.

Staff Development. The principal and unit leaders of a nominal IGE school attended a state-sponsored formal staff development workshop in 1971. The principal and unit leaders also participated in a few League activities; however, there were no such opportunities for staff teachers or others. The total staff saw various IGE films once or twice, but several staff teachers indicated that the IGE films were repetitious and unrealistic. The staff was provided the booklets, but used them minimally. A 1-day session served as an overview; a few teachers attended a reading workshop (Ironsides, 1972, pp. 175-176).

After these initial training sessions, however, school personnel had virtually no contact with other persons, schools, agencies, or materials related to MUSE/IPM. The state agency did not visit, nor provided other assistance. The school itself also remained aloof: no representatives to League meetings; no teacher attending a problem-oriented workshop; no one visited other nearby IGE schools. A number of resources came from the state coordinator, but since no IGE subject was operative, these were stored away for future perusal by the staff. The state office provided a detailed guide, but it was used minimally. Inservice training was limited to what might occur during unit meetings or came to a standstill; the use of booklets and filmstrips in and by the “units” virtually ceased (Ironsides, 1972, p. 177; Ironsides, 1973, p. 28). Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironsides & Conaway, 1979; Goodridge, 1975; Lacy, 1972), it was estimated that this group of nominal IGE schools accounted for about 60% of 200 schools.

The principal, unit leaders, and a few teachers of a low marginal IGE school went to a state-sponsored training for principals and unit leaders in 1971. The staff was exposed to IGE filmstrips and books, followed by a local commitment meeting held for the staff. They later held a Preschool Workshop for three days usually in August 1971. This workshop consisted of staff meetings, the IIC and unit meetings, and a few hours with a consultant on Wisconsin word-attack Design. Otherwise, educators in marginal

schools had little training or discussion relating to their reform. While the Preschool Workshop gave considerable attention to new teachers, it focused little on MUSE/IPM plans or operations (Ironside, 1972, p. 189).

There was little or no school-wide inservice training after the Preschool Workshop, and virtually no use of consultants. One unit held its own inservice for a few hours, and another group met on a voluntary basis with the district leader to study the writing of behavioral objectives. The principal, unit leaders, and a few teachers all attended League training activities. However, staff made no visits to other MUSE/IPM schools, though the principal made one such visit. The principal had no direct contacts to the state coordinator for assistance of any kind, though the coordinator made two or three general visits to the school (Ironside, 1972, p. 191).

A high marginal IGE school was active in the state League of schools. The principal and unit leaders attended several League training functions during the year of 1971-72, and reported back to the staff that these were valuable sessions (Ironside, 1972, p. 159). High marginal IGE schools called on some of external resources: state coordinator, district liaison, the IGE printed materials, visiting consultants, staff of other schools, district reading consultant, and the League. In addition, the principal and unit leaders attended a R&D Center-sponsored mid-year training workshop (Ironside, 1972, p. 159). Unit leaders and a few teachers made scheduled visits to other MUSE/IPM schools in the vicinity (Ironside, 1972, p. 160).

Nevertheless, the great share of the MUSE/IPM preparation and training was directed to the principal and unit leaders in high marginal IGE schools; except for what unit leaders might pass on, staff teachers were given much less opportunity to talk, study, improve skills, and so on. There was very little inservice training for the whole staff. A few units, e.g., three of five, held inservice training within the unit in which filmstrips were discussed, IGE booklets were used, and unit operations were considered, with the emphasis on the IGE subject area (Ironside, 1972, p. 160). Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), it was estimated that this group of marginal (both low and high) IGE schools accounted for about 20% of 200 schools.

The principal and unit leaders of a true IGE school attended a state-sponsored staff development workshop in 1971. The staff viewed IGE films and strips; all attended college-sponsored conferences in 1970-71. The staff participated in 1-day local commitment/ awareness session. The total staff attended Preschool Workshop held for two days in September 1971. Workshop agenda had four emphases: IIC meeting, general staff meeting, introduction to Wisconsin word-attack design, and lengthy team meetings. The workshop – more a planning session than one devoted to training – dealt with: team assignments, children’s options, use of materials, “rules” for unit and IIC meetings, visit policies, use of open space areas, and so on (Ironside, 1972, p. 196).

After initial training, the principal called on state coordinator for training materials and assistance with IGE subject. Visits to other MUSE/IPM schools were made in fall 1971. The principal attended League training sessions and school personnel attended workshops sponsored by the R&D Center. The principal, unit leaders, special teachers, and reading teachers attended an R&D Center-sponsored 1-week unit leader training workshop and reading teachers attended R&D reading workshop in which mutual support sessions with staffs of one or two other MUSE/IPM schools were also held (Ironide, 1972, p. 198).

Also, school-wide inservice took place several times, in one case two days, another for one day, several for an hour or two. With the state coordinator present, the sessions involved viewing filmstrips and unit solving of problems posed in film. The unit leaders attended a unit leader training session (goal setting and student assessment in the unit), followed by two hours of unit meeting to work out assessment of “unit” accomplishment against criteria in the R&D Implementation Guide. Another inservice day included IGE films, team work on math and reading procedures, and development of IGE-type instructional units in science and social studies. Sessions were dovetailed into district’s own inservice schedule so that purposes of non-gradedness, continuous progress, and so on, could be dealt with and IGE materials could be used. Unit inservice was not the rule, though: a few units held one hour inservice sessions for whole year; one unit held sessions for two and a half hours during which IGE films and strips were used at times; and a few units held none (Ironside, 1972, pp. 198-199). Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside & Conaway, 1979; Goodridge,

1975; Lacy, 1972), it was estimated that this group of true IGE schools accounted for about 20% of 200 schools.

Role Relationship Change and Shared Decision-Making. According to the developers of the model, it was important that the role relationships and responsibilities were clearly specified and understood so that participants in the implementation of MUSE/IPM could interact with one another with a shared understanding of what a participant was expected to do. In line with role relationship change, the model also demanded that the principal turn over systematically some of his/her authority to the units and the individual teacher turn some of his/her authority over to the units (Selover, 1976, pp. 76-77).

In nominal IGE schools, there was evidence that principals, unit leaders, and teachers did not share common understandings and expectations regarding their role relationships and responsibilities. Thus, there were differences in perceptions regarding role behaviors expected of each participant. The past expectations of the participants' roles and responsibilities that were deeply ingrained in the established institutional practices, did not easily change in a short time period without a fundamental transformation in the grammar of schooling.

The lack of change in role relationships and responsibilities was related to and/or resulted in the lack of shared decision-making in nominal IGE schools where neither of the above authority transfers – from the principal to unit and from individual teachers to units – took place. The principal of a nominal IGE school dominated IIC meetings, remained the major decision maker on both managerial and technical matters, provided little opportunity for distribution of decision-making, and handed out meeting agendas that were more like notes and announcements (Ironside, 1973, pp. 28-29). In these nominal IGE schools, unit leaders were not committed to the concept of IGE and did not adequately prepare to discuss and defend in the IIC issues of concern to their unit members (Moyle, 1977, p. 222). The teachers in those schools did not perceive a reduction of centralization during the period of implementation and perceived themselves to have no involvement in making potent decisions of school-wide scope (Wright, 1976; Felker, 1980).

The lack of both changes in role expectations and relationships and shared decision-making was highly correlated with the lack of staff commitment. After schools had been in the program for a period of time, teacher commitment began to drop off (Gaddis, 1977). A number of the staff members left the school because they couldn't cope with the demands of the program. Some teachers felt that it was too much trouble to shift students; thus they went back to self-contained classrooms. Consequently, unit teachers showed much resistance to teamwork, were not committed to planning together, held on to their own students, and taught single-aged students in self-contained classrooms (Ironsides, 1973, pp. 28-29).

In marginal IGE schools, school personnel understood the roles expected of each occupant, but they did not overcome not only the conflict between the old and new role relationships and responsibilities within an individual, but also tensions between role occupants among unit members as well as among the whole personnel as a group. An incongruence between the role expectations and need-dispositions of school personnel caused conflicts among the staff that manifested themselves in the form of problems of interpersonal communication, agreement on philosophies and teaching methodologies, and clarification of roles and responsibilities (Heffernan, 1976, p. 130).

With shared understandings of role relationships and expectations but not materialized within himself/herself, either the principal or unit teachers of a marginal IGE school did not turn over his/her authority to the units to a large degree. Sometimes the principals of nominal IGE schools encouraged discussion to some extent during IIC meetings and provided some opportunity for distribution of decision-making with respect to technical matters, but remained the major decision maker especially on managerial matters.

In marginal IGE schools, unit leaders were not so much committed to the concept of IGE and prepared a little to discuss and defend in the IIC issues of concern to their unit members. The low effectiveness of the unit leader's representation function also contributed to the low cohesiveness of the IIC (Moyle, 1977). Marginal IGE school teachers perceived themselves to have little involvement in making potent decisions of school-wide scope (Wright, 1976; Felker, 1980).

The unit leader and unit teachers shared common understanding regarding planning and deciding together; however, they had problems when they taught together, while putting their plans and decisions into practice. They tried to solve interpersonal conflicts through various channels, resulting in success some times but in failure many times; or one unit making some progress but the other unit not doing well. One or two units' teachers employed team teaching, cooperated in planning, and shared resources while other units' members did not learn how to do much more than plan together (Ironsides, 1972, p. 190).

With shared understandings of role relationships and expectations among themselves, school personnel of true IGE schools overcame not only the conflict between the old and new role relationships and responsibilities within an individual, but also tensions between the principal and unit leaders as well as among unit members. Whenever there was an interpersonal conflict, they solved these conflicts through constructive discussions during formal unit meetings and informal encounters.

In relation to shared decision-making in true IGE schools, both the principal and unit teachers turned over his/her authority to the units. In successful IGE schools, the principal shared his/her authority and power to make decisions with unit leaders; thus the IIC meetings were characterized by effective leadership by the principal, give-and-take, productive use of time, participation by all. In these schools, the decision-making was characterized more by consensus, participatory and delegating styles than unilateral one.⁴ The principal of a true IGE school encouraged the increased participation, although the principal felt that it was necessary for the staff to improve decision-making skills. When there was a concern with the communication between principal and staff, the principal (and IIC's) sought to solve the problem via staff meetings, principal attending unit meetings, notices, parties, and so on (Ironsides, 1972, p. 210).

In true IGE schools, unit leaders were committed to the concept of IGE and adequately prepared to discuss and defend in the IIC issues of concern to their unit

⁴ Delegated decision making refers to decision making within the Instructional Improvement Committee (IIC) and implies that an IIC member (or members) other than the principal was given responsibility for the final decision; participatory decision making refers to the IIC and implies that each member has a voice in the decision process; unilateral decision making refers to the principal, the chairman of the IIC, making the final decision although the other members may have had input; and consensus refers to general or unanimous agreement within the IIC (Loose, 1972, p. 11).

members. The effectiveness of the unit leader's representation function also contributed to the cohesiveness of the IIC through the facilitation of horizontal and vertical, two-way communication (Moyle, 1977).

With shared role expectations and shared decision-making, units of a true IGE school, moved smoothly through planning, scheduling, teaching assignments, parent communications, and so on. They shared children, rooms, resources, teaching skills; and teams of teachers and aides worked together with varied groups of students often in an open space area. The units had good leadership and open communication, and the meetings were productive. All units worked out "team groundrules" (Ironsides, 1972, p. 196). In doing so, they moved from a self-contained classroom to a team-oriented unit.

However, even true IGE schools could not reach a point where they completely solved inter-unit communications or school-wide coordination problems. Given the demands for maintaining rationalized practices to handle a batch of students, it was a fundamental transformation for them to cooperate between units and achieve school-wide coordination that proved practically impossible.

School District Support. With regard to nominal IGE schools, some districts did not fulfill their commitment to assist schools in implementing IGE and withdrew district financial support (Gaddis, 1977, pp. 188-198). Due to this withdrawal of financial support, the aides were cut back or they were completely eliminated from schools, or the student-teacher program was dropped; thus, teachers had a hard time grouping and there was no clerical help for record keeping (Gaddis, 1977, p. 192). In addition, the district turned down teachers' request for unit leaders' extra pay; then the school dropped IGE (Gaddis, 1977, p. 193).

In some school districts, rivalry over district funds existed between IGE and non-IGE schools. The non-IGE schools felt they were being slighted because the IGE schools were getting additional things; thus, there was pressure on districts from non-IGE schools to drop the program. In order to avoid the rivalry issue, districts simply withdrew their commitment to support IGE (Gaddis, 1977, p. 193). In another case, the former superintendent was very pro-IGE and encouraged schools to go IGE; however, a new superintendent came in with a different philosophy and discontinued the program (Gaddis, 1977, p. 195). Also, the community contributed to the failure of IGE by not

supporting increases in local school taxes to support the innovation (Gaddis, 1977, p. 194).

In the case of marginal IGE schools, the superintendent, and particularly the board of education, were supportive and helpful; this support included considerable expenditure for materials, travel, and summer workshops.⁵ For example, the Board's formal monthly Newsletter pushed the concepts and informed parents simultaneously (Ironside, 1972, p. 175). District personnel were generally supportive and steered extra funds for materials, addition of aides, and so on (Ironside, 1972, p. 153). At the district level, a local liaison was appointed early, and this person along with the superintendent attended all meetings of the formal training chain except a "national awareness" session. A district reading consultant was assigned to serve MUSE/IPM schools (Ironside, 1972, p. 153). The district liaison helped the school with a plan on developing and implementing an IGE curriculum: how best to use aides, what supplemental materials to have available, and how to keep records (Ironside, 1972, p. 159).

The school district supported a true IGE school in different ways. For example, the District had definite inservice schedule, and devoted summer work to development of objectives and outlines in reading and math. Also the district had strong curriculum committee, which served the district policy function regarding MUSE/IPM in the school (Ironside, 1972, p. 195).

The Phase of Institutionalization

Institutionalization of innovations depends on whether or not the change gets built into the structure, has generated a critical cadre of administrators and teachers who are committed to and skilled in the change, and has established procedures for continuing assistance (Huberman & Miles, 1984). By the time of institutionalization phase, most nominal and marginal schools either discontinued the IGE program or remained traditional schools with scattered vestiges of IGE, while most true IGE schools continued into the institutionalization phase. In the history of IGE, three major factors facilitated the institutionalization of MUSE/IPM: external support, creative modification of the IGE

⁵ This description was taken from Wilkens Elementary School because this aspect of district support resembled that of a marginal IGE school, although Wilkens was classified as a nominal IGE school in Chapter 5.

program, and continued inservice for the staff.

External Support. A successful IGE school in the phase of institutionalization received continued financial, technical, and/or moral support from such agencies as the state department of education, regional education agencies, teacher education institutions, Leagues, the school district, and parents. One true IGE school pursued individualization through the implementation of IGE because of a mandate by the State Department of Education and the district's philosophy encouraging individualization (Klenke, 1975, pp. 91-92). In another true IGE school, a small group of parents was involved in selecting IGE for adoption, and its implementation and continuation. Also, teacher education institutions not only offered summer workshops for staff members to attend, but also sent their student teachers to be involved in IGE schools, while the SPC recommended that a brochure be prepared which would provide an overview of the school and the meaning of IGE so that teacher education institutions would participate in the program. At the district level, the superintendent or assistant superintendent of the district worked with interested persons from other districts to establish a Hub for the IGE schools, while the board of education granted permission to implement the innovation for a certain period.

Continued Inservice. The principal of a successful IGE school in the phase of institutionalization not only participated in training programs such as a principal-unit leader workshop, but also helped the staff attend several inservice training sessions including district training programs and weekly inservice for the staff. The principal often played an important role in supporting staff development for new members because of turnover in the original cadre of project teachers. These successful IGE schools occasionally brought in outside speakers for workshops which were open to all IGE schools in the area. Thanks to these training opportunities, a few of the successful IGE teachers evolved to conduct a workshop for the district, e.g., district's substitute teachers, and serve as consultants for schools in other districts.

Creative Modification. Given the fundamental change that IGE requested of a school in conjunction with school organization and instructional patterns and local constraints that hindered a complete institutionalization of MUSE/IPM, a number of successful IGE schools creatively modified the prototypic model of IGE in line with their

local circumstances, such as district requirements, parental expectations, teaching philosophy, and student needs.

At one true IGE school, local constraints were preventing the school from developing a differentiated staff, a component of MUSE (Klenke, 1975, p. 95). Another true IGE school organized each team to include students at a single grade level. At still another school, one team incorporated “very little” multi-age grouping of students. The homeroom groups, there, were by grade level; and instructional groups were formed by ability levels within grade levels (Klenke, 1975, p. 106).

Concerning nongradedness, 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. District requirements seemed to present many of the difficulties in achieving nongradedness. A teacher outlined these as “district reports, tests, and grade level objectives.” 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 (Klenke, 1975, p. 108).

At one IGE school, continuous progress was not well understood nor implemented (Klenke, 1975, p. 115). In this school, except within the Wisconsin Design for Reading Skill Development, criterion referencing was not an assessment practice. In another school, the staff’s resistance to the use of criterion referencing arose in association with community norms that required a comparison of student growth with grade level norms. Even the results of the Wisconsin Design for Reading Skill Development tests were “translated into traditional grade-level thinking” (Klenke, 1975, p. 115).

At another school, in relation to IPM, general school-wide objectives, as defined in Step 1 of the IPM, had not been identified (Melvin, 1976, p. 188). No effort was made by the staff to specify school-wide objectives. However, the implementation of Steps 2 through 7 of instructional programming followed the model closely when the teams used the WDRSD materials and the suggested guidelines for implementation (Melvin, 1976, p. 173).

The Plan

Dealing with the period between 1965 and 1971, Part I describes the backgrounds and events that led to not only the development of the Multi-unit School-Elementary (MUSE) and the Instructional Programming Model (IPM), but also to the completion of the seven-component IGE system by the Wisconsin Research and Development Center.

Part II displays case studies of five schools adopting MUSE/IPM during the 1969-1971 period, followed by nationwide mobilization for the dissemination and adoption of the organizational component of the IGE system (MUSE) and the instructional component of the IGE system (IPM) in ten states between 1971 and 1973. Also, Part II describes district support for IGE implementation and training participation by district and school personnel, 1971-73, followed by an explanation of key factors in the adoption processes of MUSE/IPM.

Part III offers four cases of schools implementing the Multi-unit School-Elementary and the Instructional Programming Model. Part III also paints the national picture of implementation of MUSE/IPM, followed by an explanation of key factors in the implementation processes of MUSE/IPM, 1971-73.

Part IV delineates three case studies of schools continuing the Multi-unit School-Elementary and the Instructional Programming Model from 1974 through 1981. In addition, Part IV displays the national picture of continuation of MUSE/IPM, followed by explanation of key factors in institutionalization processes of MUSE/IPM, 1974-1981.

Finally, Chapter 9 summarizes key factors that either facilitated or hindered the process of innovation for IGE in opportunistic, nominal, marginal, and true IGE schools. Then, Epilogue makes final statements about the rise and fall of the IGE movement in terms of the process of change versus the content of change and ancillary factors related to the changeover to MUSE/IPM before drawing major implications for contemporary education reform/change.

PART ONE

**THE RESEARCH AND DEVELOPMENT OF
INDIVIDUALLY GUIDED EDUCATION,
1965-1971**

Chapter 2

The Development of the Multi-unit School-Elementary and the Instructional Programming Model

This chapter describes the backgrounds and events that led to not only the development of the Multi-unit School-Elementary (MUSE) and the Instructional Programming Model (IPM), but also the completion of the seven-component IGE system. These backgrounds and events include the social and educational context of the 1950s-60s; the establishment of the Wisconsin Research and Development Center; the development of the Wisconsin Improvement Program (WIP); the first units in schools, 1965-68; the emergence of the Multi-unit schools; organizational profile of three early Multi-unit schools, 1967-68; and a joint project between the Center and I/D/E/A/.

Social and Educational Context of the 1950s-60s

During the post-war era (1950s), an outcry for educational reform came from an array of critics of life adjustment education in American schools. Arthur Bestor, James Conant, John Gardner, and Hyman Rickover were among chief critics making new demands on education. They maintained that equality of opportunity did not mean the same education for everybody and that the national welfare called for special provisions for the gifted. In addition, the success of the Soviet Union in launching Sputnik in 1957 shifted emphasis from life adjustment to excellence and led to the National Defense Education Act in 1958. This law raised the number of technical and scientific offerings in American high schools and colleges. However, not all educators were enthusiastic about the restricted emphasis on quality for the elite or the importance placed on mathematics, science, and foreign languages (Pulliam & Patten, 1999, p. 183).

The 1960s were dominated by new concerns for equality of opportunity. In the wake of the revolution following the Brown case and a new concern for civil rights, attempts were made to satisfy the needs of all children. Ethnic and multicultural studies were promoted, and bilingual programs were implemented in schools with a number of non-English speaking students. Efforts at reorganizing schools to achieve desegregation and the use of busing to build integrated schools dominated the 1960s and continued into

the 1970s. Further, attempts were made to provide the lower-class youngster with an opportunity to compete in middle-class schools through programs like project Head Start. Critics claimed that integration and equality attempts took away from the move toward excellence. Others mounted concern about the lack of literacy and humanistic focus in school programs (Pulliam & Patten, 1999, p. 183).

Meanwhile, during the 1950s and 1960s, the role of the federal government in educational developments increased dramatically. The passage of the Cooperative Research Act in 1954 authorized the United States Office of Education to sign contracts with higher educational institutions to conduct research, surveys, and studies in education. Funds were limited, but the law helped to shape and define educational research. The passage of the National Defense Education Act (P.L. 85-864) provided categorical assistance for secondary and higher education to increase the quantity and quality of scientists, engineers, and foreign language specialists. Its impact was to establish education as a national concern (Rebeck, 1977, pp. 8-9).

A landmark passage of the Elementary and Secondary Education Act (ESEA) of 1965 expanded even further the role of the federal government in education. This Act provided financial assistance to local educational agencies, public and private, for the education of children of low-income families; appropriations for school library resources, textbooks, and other instructional materials; establishment of supplementary educational centers and services; educational research and training; and grants to strengthen state departments of education (Bailey & Mosher, 1968).

The Cooperative Research Act was amended as Title IV of ESEA. The Commissioner of Education “is authorized to make grants to universities and colleges and other public or private agencies, institutions, and organizations and to individuals, for research, surveys, and demonstrations in the field of education...and for the dissemination of information derived from educational research...to provide by contracts or jointly financed cooperative arrangements with them for the conduct of such activities” (P.L. 531, Sec. 2 [a] [1]). Research and development centers attached to universities had been established during the Kennedy Administration under the provisions of the Cooperative Research Act of 1954. After ESEA Title IV amended the Cooperative Research Act of 1954, the existing research and development centers, such as the one at

the University of Wisconsin created in 1964 were continued and extended in time; in other cases, research and development centers were established *de novo* based on submissions by universities. The research and development centers were engaged largely in basic research, while the educational laboratories tended toward immediate problem solving, curriculum development and evaluation, and pilot demonstrations (Rebeck, 1977, pp. 10-11).

The Office of Education, under the authority of the Cooperative Research Act, signed agreements with the Universities of Oregon and Pittsburgh for the Center for the Advanced Study of Educational Administration, and the Learning Research and Development Center, respectively, in the fall of 1963. The Center for Learning and Re-Education at the University of Wisconsin was created through contract, in 1964. Shortly thereafter, Harvard University established the Center for Research and Development in Educational Differences. By the end of 1965, under the provisions of ESEA Title IV, centers were also created at the University of California (Berkeley), Stanford University, the University of Georgia, the University of Texas, and New York City universities (Goodson et al., 1965, p. 4).

The Establishment of the Wisconsin Research and Development Center

The University of Wisconsin signed an agreement with the United States Office of Education to establish the Research and Development Center for Learning and Re-Education on August 6, 1964 (Klausmeier & Associates, 1990, p. 1). The proposal for the establishment of the Center stated the primary objective of the Center as follows:

to improve the efficiency of learning, both formal and informal, by children, youth and adults. How learning takes place - particularly the development of concepts and problem solving or thinking abilities essential to the mastery of school subjects and vocational skills – was to be investigated through sustained, systematic basic and applied research that utilized the resources of the University of Wisconsin and the educational agencies of the State of Wisconsin. Outcomes of learning in the cognitive domain, especially concepts and problem solving, were given attention as one aspect of the general objective as well as outcomes in the affective domain (Proposal, 1964, p. 1 cited in Rebeck, 1977, p. 63).

Upon the foundation of the Research and Development Center for Learning and Re-Education, Herbert Klausmeier was appointed as Co-director for Research and in

1966 became its Director, a position he held through 1972; Lindley Stiles, Dean of the School of Education, became Co-director for Administration. The Center staff consisted of twenty-five professors, nine research associates, fifty-two research and project assistants plus administrators and secretaries (Rebeck, 1977, p. 64). A University Advisory Panel composed of professors from sixteen departments and the Inter-Agency Consultants representing University administration, school administration, and other educational agencies within the state served as local advisory groups (Rebeck, 1977).

A National Evaluation Committee was formed to review annually the progress of the Center. Members of the committee, recognized educators from various educational institutions around the country, received reports from the Center staff and in turn reported to the Policy Board on the progress of the Center and made suggestions as well (Rebeck, 1977, pp. 64-65)

While keeping the ongoing cooperative relationship among schools, universities, and the State Department established during the 1950s, the Center had local schools represented in the Inter-Agency Consultants group, a Schools-Center Planning Committee, and an advisory committee to the mathematics education group as well as in a number of experiments carried out by the Center. Among the immediate concerns that the school people asserted were ascertaining students whose formal education would end with high school graduation, providing for culturally-disadvantaged and/or slow learning children, receiving assistance in carrying out research projects, and evaluating their instructional program (Rebeck, 1977, p. 65).

The Wisconsin Improvement Program

Prior to the creation of the Center, some of the elements that would be built into the structure of the R&I unit, and in turn into MUSE, had been developed as part of the Wisconsin Improvement Program (WIP). The University of Wisconsin, the state Department of Public Instruction, and Wisconsin school systems worked closely together to develop this program (O'Brien, 1962, pp. 3-4 cited in Rebeck, 1977, p. 58). Late in 1958, a group of superintendents from Wisconsin school systems (Appleton, Hales Corners, Janesville, Lacrosse, Madison, Manitowoc, Racine, Wausau, and West Bend) met with representatives of the School of Education, University of Wisconsin-Madison,

to discuss the needs for improvement in the curricula provided by the University for teacher certification and the need for improvement in teaching and learning in local school districts. The group formalized their relationship with the title, “The Wisconsin Improvement Program-Teachers Education and Local School Systems.” Grant application was made to the Ford Foundation and was awarded early in 1959 (Rebeck, 1977, p. 58).

The focus of the program was on

1) the development of a five-year rather than the four-year program leading to teacher certification; 2) the improvement of clinical experience for prospective teachers, including the development of the teacher internship; 3) better utilization of certificated workers in local school systems; 4) the addition of non-certificated staffs in local school systems, such as instructional secretaries, technicians, teacher aides; 5) increased utilization of learning equipment, with particular reference to programmed learning materials, self-teaching machines, television. (Rebeck, 1977, pp. 58-59)

As part of the Wisconsin Improvement Program, efforts were made to extend and capitalize on human talent. In order to better utilize certificated workers in local school systems, it was suggested that non-certificated staff be added in local school systems. As a result, instructional secretaries were employed to relieve teachers of clerical burdens (Rebeck, 1977, p. 60). In addition, a five-year teacher preparation program – Teacher Internship Program – was developed for teacher interns to work in local school systems. A second Ford Grant in 1962 was awarded to expand and improve this Teacher Internship Program. Instructional teams, organized in participating schools, accommodated internships for future teachers. The Teacher Internship Program placed an emphasis on experience for the interns, curricular areas, taking advantage of individual and collective strengths of teachers, and providing for individual differences (Rebeck, 1977).

The Wisconsin Improvement Program, under the guidance of John Guy Fowlkes, encroached well into the areas of teacher education, team teaching, curricular revision, and use of technology for teaching/learning, and was well-recognized within the state as schools, universities, and the State Department collaborated to improve the conditions of education. By 1965, participating groups were expanded to encompass fifty-seven school districts, six universities, a college, and the State Department. Some of the developments within the Wisconsin Improvement Program would be incorporated into the structure of

the R&I Units. The team concept was probably the most visible; differentiated staffing was also pivotal, as was the principle of seeking innovative ways of helping students learn better. Experimentation was indispensable to the program as well (Rebeck, 1977, pp. 72-73).

The First Units in Schools, 1965-68

The R&I unit was created by a team involved with the project MODELS. Led by then Co-directors Klausmeier and Goodson and Research Associate Goodwin, Project MODELS was the designation offered to the large-scale research and development program for Maximizing Opportunities in Learning in the Schools (Klausmeier et al., 1966, p. 3). As part of Project MODELS, representatives of 13 schools, the State Department of Public Instruction, and the R&D Center met irregularly as the Schools-Center Planning Committee and dealt with two major items during the 1964-1965 school year. The first focused on establishing an innovative organization within each school district that would serve to identify important research problems and favorable innovations of the district. The second was the actual identification of these research problems and promising innovations (Klausmeier et al., 1966, p. 3).

This committee started gathering in workshop groups in the schools of the four systems – Janesville, Madison, Milwaukee, and Racine – and soon concentrated on obstacles to individualizing instruction. Before long, the committee recognized and categorized “the less favorable organizational and procedural characteristics of the age-graded, self-contained form of elementary schooling” (Walter et al., 1975, 3). These characteristics were:

- Students are required to adjust to uniform educational programs, and provisions for differences in rate of learning, style of learning, and other characteristics are inadequate.
- Students are placed in age-grade classes and are expected to attain the same instructional objectives by studying the same graded basic textbooks and supplementary materials.
- Students are frequently evaluated using norm-referenced tests of intellectual ability and educational achievement, and such tests are often used for categorizing and grading students, not for improving their instruction.
- Teachers are treated as if they are equally competent in all subject fields and in all media and methods of instruction and appropriate provisions are seldom made for differences among teachers in interests, knowledge, experience, and expertise.

- Teachers spend nearly all their time throughout the school day with children, leaving little time for planning and evaluating instructional activities.
- The principal tends to be a building manager rather than an educational leader; the teacher is an independent ruler of a classroom rather than a cooperative team member, and administrative arrangements discourage cooperative planning and decision making.
- The staff spends most of its energy in keeping school going, and little effort is devoted to research and development activities that are essential to continuous improvement of educational practice.
- The staff of each school functions in relative isolation from other schools, and communication networks for sharing creative ideas, materials, and instructional approaches function only sporadically, causing great loss in educational effectiveness.
- The typical school building is not well adapted to effective instruction; access to library, audiovisual, and other instructional materials and aids is circumscribed; and space configurations impede varied types of grouping and learning activities.
- Parent contact with the schools is largely negative; it is concerned primarily with problems of school finance or student discipline, and the primary means for communication between the school and the home is by report cards or parent-teacher conferences, supplemented occasionally by a school newsletter. (Klausmeier et al., 1977, p. 3; Walter et al., 1975, 3-4)

At the same time, Klausmeier and his staff were presenting workable solutions to these unfavorable characteristics of the age-graded, self-contained form of elementary schooling. Among other sources, the solutions were extracted from Klausmeier's comprehensive research and writing including his textbooks Teaching in the Elementary School (four editions since 1956) and Learning and Human Abilities: Educational Psychology (four editions since 1961). The practitioners would react to Klausmeier by suggesting additional unfavorable attributes and Klausmeier would offer new potential solutions "in the form of new structures, materials, methods, and refinements of existing ones" (Klausmeier, 1976, p. 27).

Based on the discussions with these practitioners on the committee, Klausmeier determined in the summer of 1965 that an innovative kind of school building organization was necessary to handle some of the reciprocal concerns of the Center, the school system, and the State Department of Public Instruction regarding the development of ideal instructional systems and refined experimentation. This innovative organization was ultimately designated the Research and Instruction unit (R&I unit). The reasoning behind the innovative organization was the "professional opinion that schools are not organized presently to carry out controlled experimentation effectively, to develop new instructional procedures, and to test innovations" (Goodson et al., 1965, p. 33).

While deliberating on a number of R&I unit organizations, Klausmeier and the committee selected one that included a learning specialist directly responsible for the education of about one hundred children, two certified teachers, a full-time secretary, a clerical aide, and perhaps an intern. The learning specialist would spend half his/her day working directly with children and supervising the unit; s/he would spend the other half planning with the building principal, supervisors, and university personnel. The learning specialist was expected to be an expert in diagnosing and analyzing learning needs of children, in prescribing educational treatments, and in guiding others involved in teaching (Rebeck, 1977, pp. 69-70).

The committee, now consisting of representatives of five Wisconsin school systems – Janesville, Madison, Milwaukee, Racine, and West Bend – and the R&D Center, reached a conclusion that the concept of the R&I unit provides a superior organizational design for improving educational conditions of learning, including motivation, for culturally disadvantaged children as well as an exemplary solution to instructional problems for all children. In this regard, the R&I unit not only was initiated in conjunction with Title I of the Elementary and Secondary Education Act (ESEA)¹, but also was presented as a creative innovation to be pursued by way of planning grants under Title III of the same act² (Klausmeier et al., 1966, p. 7).

In an attempt to promote the establishment and development of R&I units in local schools, seminars and workshops at the Center and in the local schools were held in the second semester of 1965-66, sharing the knowledge and enhancing the capacities of the learning specialists and other personnel. Further, an eight-week institute for learning specialists was offered during the summer session of 1966 at the University of Wisconsin. Building principals, central office staff personnel, and teachers attended parts

¹ The ESEA of 1965 states the purpose of Title I (Better Schooling for Educationally Deprived Children) as follows: “to provide financial assistance...to local educational agencies serving areas with concentrations of children from low-income families; and to expand and improve their educational programs by various means...which contribute particularly to meeting the special educational needs of educationally deprived children” (Public Law 89-10, 89th Congress, H. R. 2362, April 11, 1965, p. 1).

² The ESEA of 1965 states the purpose of Title III (Supplementary Educational Centers and Services) as follows: “to stimulate and assist in the provision of vitally needed educational services not available in sufficient quantity or quality, and to stimulate and assist in the development and establishment of exemplary elementary and secondary programs to serve as models for regular school programs” (Public Law 89-10, 89th Congress, H. R. 2362, April 11, 1965, p. 15).

of the institute. A staff member from each of the first five school districts that initiated R&I units was employed to serve in the institute. This same staff member furnished leadership in conjunction with the development and enhancement of R&I unit functions during the coming years in his/her local school district (Klausmeier et al., 1966, p. 7).

Thanks to these seminars, workshops and the institute, seventeen units were initiated during the second semester, 1965-66, in a variety of buildings of four school systems -- Janesville, Madison, Milwaukee, and Racine – with approximately 1200 elementary and 1000 junior high school students. Controlled experiments were carried out in some of these units; their major emphasis, however, was on offering superior instruction. Before long, a sixth school district, Manitowoc, became involved with the Project and created its first units in the fall of 1966 (Klausmeier et al., 1966, p. 7).

The Janesville, Madison, Racine, and Milwaukee school districts were seeking ways to meet the needs of “educationally deprived” children eligible for ESEA Title I grants. The central office staff and administrators of these districts noticed in the R&I unit concept an opportunity to identify instructional approaches and materials appropriate for these children as well as an opportunity to lower the teacher-pupil ratio with the added staff member provided in the unit (Klausmeier & Quilling, 1968, p.11). In contrast, Manitowoc school district was interested in the R&I unit concept as an exemplary innovation to be pursued through planning grants under Title III of ESEA (Wardrop et al., 1967, p. 3). Also, the staffs of the Janesville public schools and Manitowoc public schools wanted to establish R&I units not only because they were completely familiar with teaming through participation in the Wisconsin Improvement Program but also because they noticed such opportunities as to become acquainted with research and development strategies and for preservice interns from the Wisconsin Improvement Program (WIP) to be involved in the innovative organization and in research and development activities (Cook et al., 1968, p. 3). Thus, the central office staff, building principal, and teachers collaborated jointly in establishing R&I units in a number of schools in these Wisconsin districts (Quilling et al., 1968, p. 3).

In these school systems, the principals, unit leaders, and unit teachers received much of their introduction and orientation to the R&I unit concept while attending an eight-week Institute during the summer of 1966. These participants identified a problem

or concern that could be explored during the school year 1966-67, which became the basis for independent study throughout the summer. They also made initial plans for an experiment in such subject areas as language arts, reading, spelling, and mathematics. The sharing of ideas with other unit leaders, the organizational planning sessions with R&D Center staff members, and the instruction of diverse subject matter specialists furnished the basis for numerous ideas to be implemented, including ideas for organizing their units, during the school year 1966-67 (Cook et al., 1968, p. 8; Wardrop et al., 1967, p. 3).

Unit Organization

Except for three schools in five districts in 1966-67, the schools involved with Project MODELS created single-grade level R&I units, rather than units consisting of multi-aged students: Kindergarten units in Franklin School in Janesville and Franklin School in Racine; first-grade units in Wilson School in Janesville, Franklin School and Longfellow School, both in Madison; Second-grade units in Howell, Racine and Franklin School, Racine; third-grade unit in Giese School, Racine and Jackson School, Manitowoc; fourth-grade units in Case Street School, Milwaukee, Giese School, Racine, and McKinley, Manitowoc; a fifth-grade unit in Winslow School, Racine; and a sixth-grade unit, Adams School, Janesville (this unit was extended into a fifth and sixth-grade unit organized with the purpose of non-grading the instruction). Exceptionally, in Huegel School, Madison, the teachers and students were organized into two multi-aged units: K-2 and 3-6 grade. Multi-aged primary units were established in Homes School, Milwaukee and Stephen Bull School, Racine (Cook et al., 1968; Klausmeier et al., 1968; Klausmeier & Quilling, 1968; Quilling et al., 1968; Wardrop et al., 1967).

The composition of multi-aged R&I units and their student bodies in four units of three schools in 1966-67 is outlined in Table 2.1. Table 2.1 shows that: (1) in one school, the teaching staff, consisting of 15 teachers, was organized into two R&I units, the K-2 grade unit with one unit leader, eight unit teachers, and one paraprofessional responsible for 261 students and the 3-6 grade unit with one unit leader, five unit teachers, and one paraprofessional responsible for 150 students; (2) one primary unit (6- and 7-year-old pupils) had one unit leader, three unit teachers responsible for 90 students; (3) one

primary unit (6, 7, and 8-year-old) had one unit leader and five unit teachers responsible for 125 students (Klausmeier et al., 1968; Klausmeier & Quilling, 1968; Quilling et al., 1968).

Table 2.1
Composition of Multi-aged R&I Units, 1966-67

No. units	No. Unit Leader	No. Unit Teachers	No. Teacher Aide or Intern	No. Students	Grade Level
1	1	8	1	261	K-2
1	1	5	1	150	Grade 3-6
1	1	3		90	Primary
1	1	5		125	Primary

Source: Created based on data from Research and Development Activities in R&I Units of Four Elementary Schools of Madison, Wisconsin, 1966-1967 (Tech. Rep. No. 48) (pp. 15-16), by H. J. Klausmeier & M. R. Quilling, 1968, Madison, WI: Wisconsin Research and Development Center for Cognitive Learning; Research and Development Activities in R&I Units of Two Elementary Schools of Milwaukee, Wisconsin, 1966-1967 (Tech. Rep. No. 46) (pp. 3-4), by M. R. Quilling, D. M. Cook, J. L. Wardrop and H. J. Klausmeier, 1968, Madison, WI: Wisconsin Research and Development Center for Cognitive Learning; Research and Development Activities in R&I Units of Five Elementary Schools of Racine, Wisconsin, 1966-1967 (Tech. Rep. No. 52) (pp. 3-4), by H. J. Klausmeier & M. R. Quilling, J. L. Wardrop, 1968, Madison, WI: Wisconsin Research and Development Center for Cognitive Learning.

Team Teaching

In the first R&I units, team teaching was a well-established practice, in large part because teachers were completely familiar with teaming through the Wisconsin Improvement Program. For example, in Adams School in Janesville, the whole instructional program of the sixth-grade unit was collaboratively planned and taught. The staff met with the principal 5-10 times per month. Planning sessions were held periodically from 8:00 to 8:45. Instruction in the skill areas of reading was based upon achievement groups. Each teacher instructed two different groups, for example, a high achieving group and a low achieving group. One teacher circulated among all groups and offered several weeks of individualized reading to each group. Social studies and science were integrated into what was called a unit plan. The sixth-grade staff found the R&I unit organization to be quite adaptable to this unit plan because it provided a variety of opportunities for groupings. Large group instruction was utilized for film presentations, lectures, and other audio-visual materials. Various small groups were organized on the

basis of interests, gender, ability, and heterogeneity. Although this unit had limited physical facilities, careful planning resulted in the maximum utilization of both the facilities as well as the staff. The interns in the unit ended up teaching full time, thereby providing the unit leader enough release time to fulfill other R&I responsibilities. The unit leader and teachers indicated that a half-time secretary proved to be helpful in taking most clerical and housekeeping duties away from the teachers. She also aided teachers in supervising the students (Cook et al., 1968, pp. 3-4).

In Case Street School, Milwaukee, the leader of the fourth-grade unit had meetings with the building principal and with the unit teachers an average of more than eleven times a month. Regularly scheduled team meetings were held about once a week. It soon became evident that these teachers were gathering to share and plan on a daily basis. They oftentimes ate lunch together and discussed plans (Quilling et al., 1968, p. 7). Unit teachers shared teaching in the special subjects, physical education and music. They had an opportunity to select preferred units in social studies and science and take on leadership in developing the instructional activities for the unit. Instructional plans were then reviewed with other unit teachers and the subsequent teaching was shared by all. The unit teachers felt they had more time to actually look for good materials and generate good instructional activities (Quilling et al., 1968, p. 7). Students were assigned to one of seven reading groups based upon their reading ability. The unit leader furnished much supplementary help to the poor achievers. Also, the unit leader helped individual students with their independent reading (Quilling et al., 1968, p. 7).

As part of the evaluation of the R&I units, eight teachers in R&I units in Milwaukee were compared with teachers in 12 traditionally organized schools. Responses to a teacher opinion questionnaire showed a number of disparities between these two groups. In the first place, R&I unit members spent an average of 27 percent of their time “designing a model instructional program,” as compared to an average of 18.5 percent by the teachers in control schools. Likewise, teachers in R&I units spent an average of 17 percent of their time “discussing the results and/or implications” of research, as compared to 4.7 percent by teachers in control schools. In contrast, teachers in the control groups indicated spending an average of 40.5 percent of their time “engaging in innovative activities,” while teachers in the R&I units indicated spending

just 18 percent of their time in such activities (Quilling et al., 1968, p. 15). R&I unit teachers reported that they had taken greater advantage of their district's consultant and service staff and placed greater value on consultant assistance from outside the school district, while five of the twelve teachers of control group indicated receiving no assistance from outside the school district (Quilling et al., 1968, p. 15). One other significant difference was that R&I unit teachers felt they were getting along better than usual with their fellow teachers, while all of the teachers in control group reported they were getting along "about as well as in the past" with their fellow teachers (Quilling et al., 1968, p. 15).

Research and Development Activities

In an effort to design a model instructional program, R&I units in the five school districts involved with Project MODELS carried out a variety of experiments in such subject areas as language arts, reading, spelling, arithmetic, and mathematics during the year of 1966-67. In Janesville, there were experiments with: (1) three approaches to spelling (sixth grade, Adams School); and (2) four instructional approaches to the development of mathematical concepts (first grade, Wilson School). In Madison, the experiments dealt with: (1) language enrichment (kindergarten unit) and the linguistic approach to reading (first-grade unit, Franklin School); (2) language enrichment for disadvantaged children (first grade, Longfellow School); (3) motivation and individualization (grade 6, Marquette School); and (4) developing a facilitative environment for an individualized reading program (Huegel School). In Milwaukee, the experiments were concerned with: (1) sixth grade pupils as models for primary children (primary unit, Holmes School); and (2) individualization in mathematics (fourth-grade unit, Cass Street School). In Racine, teachers were interested in: (1) individualization and motivational procedures in mathematics (second-grade unit, Howell School, and primary and third-grade unit, Stephen Bull); (2) individualization in handwriting and spelling (third- and fourth-grade units, Giese School); (3) instructional procedures in Language Arts for disadvantaged children (fifth grade, Winslow School; third-grade, Stephen Bull; second-grade and kindergarten units, Franklin School); and (4) the effects of increased Home-School Contact on Parental Attitudes and Student Achievement (Howell School).

In Manitowoc, educators investigated: (1) individualization in spelling (fourth grade, McKinley School); and (2) homogeneous grouping in Mathematics (third grade, Jackson School) (Cook et al., 1968; Wardrop et al., 1968; Quilling et al., 1968; Klausmeier et al., 1968; Wardrop et al., 1967).

The Emergence of the Multi-unit Schools

By 1966-67, forty-one elementary (and twelve secondary) units were established in Racine, Madison, Janesville, Milwaukee, Manitowoc, and West Bend. Vast field studies were conducted to determine whether or not the R&I units were fulfilling their major functions:

- (a) developing and maintaining an exemplary instructional program for children, especially in connection with individualizing instruction and improving motivation;
- (b) continuously improving that instructional program through innovation, development, and research; and
- (c) diffusing desirable practices within the school building and subsequently on a larger scale. (Wardrop, Tagatz, Klausmeier, Kennedy, and Cook, 1967, p. 1 cited in Rebeck, 1977, pp. 76-77)

Concomitantly, impetus from two directions, the schools and the Research and Development Center, was changing the concept of research and development from distinct R&I units in several schools to schools entirely organized into R&I units. Schools with I&R units themselves viewed these as enormously desirable and reorganized all of their pupils into I&R units for the 1967-68 school year. Thus, seven schools involved with Project MODELS became the first “multi-unit schools” at the elementary level (MUS-E) (Parker, 1977, p. 14; Rebeck, 1977, p. 77).

In Spring 1967, the R & D Center proposed a prototypical organization for a unitized elementary school. The primary instructional unit remained the R&I unit and consisted of a unit leader (no longer called a learning specialist), two or more certified teachers, one or more non-certified adults, and the students. An instructional decision-making committee of the school - Instructional Improvement committee (IIC) -was to be formed in each school to link the units to each other, the principal, parents and the community. The term ‘multi-unit’ emerged from deliberation among schools, the Department of Public Instruction, and the Center to name the unitized school. The term

“multi” was part of the popular terminology at that time; combined with “unit” it served as a descriptive identifier (Parker, 1977, p. 14; Rebeck, 1977, p. 78).

The reasoning behind the organization of the school into units and the establishment of a decision-making committee was to provide: (a) time for planning the instructional program and decision making during normal school hours, (b) use of major certified personnel in planning the school-wide program, (c) enhancement of the effectiveness of the building principal and the central staff in improving instruction, (d) use of non-certified persons to perform multiple duties in the whole educational program, and (e) a facilitative environment in which the staff of the Center could conduct controlled experiments and developmental research collaboratively with school people (Rebeck, 1977, p. 78).

In 1967-68, Wilson School in Janesville, one of the seven first “multi-unit schools,” showed several organizational and operational patterns different from those of the traditionally organized schools (Control School A and Control School B) as shown in Table 2.2. No main differences were observed in the gender, age, or educational background of the teachers at Wilson and its control schools (Morrow et al., 1969, pp. 7-11). The students of Wilson were divided among five units – kindergarten, lower primary, upper primary, lower intermediate, and upper intermediate. Each unit was staffed by a unit leader, two to four unit teachers, a teacher aide and an instructional secretary. The units met for periods of 30 minutes or more to plan on a daily basis. The Instructional Improvement Committee consisting of the five unit leaders and the principal met twice weekly for periods of an hour or longer to determine school-wide objectives, accomplish coordination among units, and assess the school program in general (Morrow et al., 1969, p. 7).

The data in Table 2.2 suggest a number of important organizational and operational differences between Wilson and its control schools. First, in the Wilson School organized on the Multi-unit plan, the practices of collaborative planning and collaborative instruction were much more predominant than in the control schools.

Collaborative planning and instruction were the mode in reading, other language arts and the social studies in all the Wilson units. Further, a cooperative approach was utilized in mathematics by the lower primary unit (first grade) and in science by the upper

Table 2.2
 Characteristics of Planning and Instruction at Wilson and Its Control Schools, by Grade Levels

	Grade Level, Wilson			Grade Level, Control A			Grade Level, Control B		
	1 st	3 rd	5 th	1 st	3 rd	5 th	1 st	3 rd	5 th
Mode of instruction in:									
Reading	Team	Team	Team	Indiv.	Indiv.	-	-	-	Indiv.
Other Language Arts	Team	Team	Team	Indiv.	Indiv.	-	-	-	Indiv.
Mathematics	Indiv.	Indiv.	Indiv.	Indiv.	Indiv.	-	-	-	Indiv.
Science	Indiv.	Team	Indiv.	Indiv.	Team	-	-	-	Indiv.
Social Studies	Team	Team	Team	Indiv.	Team	-	-	-	Indiv.
Mode of planning for:									
Reading	Team	Team	Team	Indiv.	Indiv.	-	-	-	Indiv.
Other Language Arts	Team	Team	Team	Indiv.	Indiv.	-	-	-	Indiv.
Mathematics	Team	Indiv.	Indiv.	Indiv.	Indiv.	-	-	-	Indiv.
Science	Indiv.	Team	Team	Indiv.	Team	-	-	-	Indiv.
Social Studies	Team	Team	Team	Indiv.	Team	-	-	-	Indiv.

Source: from Student Achievement and Attitudes in Instruction and Research Units in Two Elementary Schools in Janesville, Wisconsin, 1967-1968 (Tech. Rep. No. 76) (pp. 9-10), by R. G. Morrow, M. R. Quilling, and F. Fox, 1969, Madison, WI: Wisconsin Research and Development Center for Cognitive Learning.

primary (third grade) and lower intermediate (part of fifth grade) units. By contrast, the self-contained approach was predominant at both control schools, with the exception that third-grade teachers at Control School A collaboratively planned and instructed in science and social studies. Control School B utilized the self-contained approach in all the basic subject areas (Morrow et al., 1969, p. 10).

In addition to the above data, information was obtained from Wilson School and Control School A concerning time use for instructional functions as shown in Table 2.3. The figures obtained from Control School A represent time use by the whole staff rather than just by the first and third grade teachers (Morrow et al., 1969, pp. 7-11). These data further show the predominance of the collaborative approach and the utilization of paraprofessional aides at Wilson. Wilson staff utilized more time planning collaboratively (6.9% to 0.9%) and less planning alone (5.2% to 10.9%). The presence of aides at Wilson evidently reduced the amount of teacher time used in management tasks (11.9% to 18% in Control School A), and in preparing materials for instruction (5.1% to 8.3%). Finally, the Wilson staff more frequently used diverse instructional groupings,

Table 2.3
Percentages of Instructional Staff Utilized in Various Functions During the Week of
March 18, 1968

Function	Wilson School (N=14)	Control School A (N=28)
Planning		
Alone	5.2	10.9
With other instructional staff members	6.9	0.9
Preparation (assembling materials, etc.)	5.1	8.3
Instruction		
One-to-one	8.9	4.4
Small group (2 to 15)	14.8	12.0
Medium group (16 to 35)	16.2	24.8
Large group (over 35)	2.2	0.7
Evaluation		
Alone	4.2	4.2
With other instructional staff members	3.4	0.7
Management (clerical tasks, noninstructional supervision)	11.9	18.0
Other	21.2	15.1

Source: from Student Achievement and Attitudes in Instruction and Research Units in Two Elementary Schools in Janesville, Wisconsin, 1967-1968 (Tech. Rep. No. 76) (p. 11), by R. G. Morrow, M. R. Quilling, and F. Fox, 1969, Madison, WI: Wisconsin Research and Development Center for Cognitive Learning.

spending more time than Control School A staff in one-to-one (8.9% to 4.4%), small-group (14.8% to 12%), and large- group (2.2% to .7%) situations, and less time in more conventional class size groupings of 16 to 35 students (16.2% to 24.8%) (Morrow et al., 1969, p. 11).

Organizational Profile of Three Early Multi-unit Schools, 1967-68

After seven schools were organized into the first elementary 'multi-unit schools' (MUSE) for the 1967-68 school year, Rolland J. Pellegrin (1970b) from the Center for Advanced Study of Educational Administration at the University of Oregon conducted a longitudinal study in 1967-1968 in which data were gathered in a MUSE and a control school in each of three Wisconsin school districts. These schools were concluding their initial year under the MUSE pattern. Hence, the data showed the types of changes that took place during the first year of adopting the innovation of MUSE pattern (Klausmeier et al., 1971, pp. 9-10). The major conclusions of Pellegrin's (1970b) study follows.

Working Relationships

Concerning the interdependence relationships in one MUSE, Pellegrin (1970b) found that the unit leaders were the focal points of interaction in the units, and also served as the linkages between the teachers and the principal. In a sociometric chart of a multi-unit school, the principal received nominations from ten of 15 teachers and from all of the five unit leaders. For three of the five unit leaders, an indispensable relationship was observed with the principal. Only three of 15 teachers, however, regarded their relationships with the principal as indispensable (Klausmeier et al., 1971a, p. 10). Strikingly, however, not a single teacher nominated a teacher (or a unit leader) outside his/her own unit. Further, no unit leader nominated another unit leader (or a teacher in another unit). While this school had an active IIC, the absence of interdependence relationships between unit leaders and teachers in different units suggested that cooperative work effort was confined fundamentally within the unit, and that collaborative relationships between units was minimal (Pellegrin, 1970b, pp. 2-3).

Task Structure and Specialization

Three notable differences between the teachers in MUSEs and the control schools were observed in conjunction with how they described their jobs: (1) Most MUSE teachers reported duties that were connected to the specified instructional objectives, mentioning sets of tasks that were less universal and amorphous than those recurrently provided by control school teachers; (2) There was a greater recognition among MUSE teachers of the important role planning plays in instruction (the five most important tasks of MUSE teachers were related to particular types of planning and the preparation of instructional materials); and (3) A far greater number of tasks of MUSE teachers was composed of planning and supervisory tasks that included the coordination of their work with that of other staff members (Klausmeier et al., 1971a, p. 10).

New and unique types of specialized labor appeared in the MUSEs. Three major types were identified: (1) Some teachers took responsibility for working primarily with individual pupils, others spent most of their time working with small groups or class-sized groups, and a few worked primarily with even larger groups. There were, however, variations in the amount of such instruction from one unit to another within a school, and

one of the schools maintained class-sized groups almost exclusively. In this school, individualized instruction was composed almost completely of routine drill by instructional aides; (2) Teachers served as special advisors to their colleagues, especially when a teacher had special training in a special curriculum area; (3) Specialization took place in conjunction with particular assignments; for example, some teachers took on the major responsibility in the unit for planning instructional sequence (Pellegrin, 1970b, pp. 5-6).

In the MUSEs, all principals and unit leaders agreed that the unit leader had taken over various tasks that might be performed by the principal in the traditionally organized school. As a result, the teacher naturally turned first to the unit leader for the regular duties. Even the insecure teacher, who might fear exposing his/her inadequacies to the principal in the traditional school, could not hide these deficiencies behind the closed door of a self-contained classroom in the multi-unit school. The teachers in the multi-unit school instructed in public, and the pressures of the situation logically led to their discussions with the unit leader when problems occurred (Pellegrin, 1970b, pp. 6, 13).

The Decision-Making Structure

In the three self-contained schools, decision making influencing each classroom was the privilege largely of two individuals – the teacher, serving as a primary decision maker, and the principal, who furnished advice or set the limits within which the teacher had option. Few teachers viewed themselves as involved in group decision making of any kind relative to any of these items. In the three MUSEs, however, an appreciable move away from dependence on the principal for advice and support for a situation in which colleagues serve such a function was noticed. Also, decision making was shifting from the level of the individual classroom to that of the unit. Decisions were usually made by the unit leaders and teachers in a cooperative situation. The unit leaders, in all cases, emerged as important persons in the influence hierarchy. Generally, the principal was not directly engaged in the decision-making processes of the unit. Whether or not he had an indirect influence depended on his capacity to work effectively with unit leaders in a Building Committee or Instructional Improvement Committee. Multi-unit organization apparently encouraged the development of a more decentralized influence hierarchy than

was found in the control schools. The precise form of this decentralized structure, however, varied from school to school (Klausmeier et al., 1971a, pp. 10-11; Pellegrin, 1970b, pp. 7-9).

Operational Goals

Remarkable changes had also taken place in the operational work goals which teachers set for themselves. In the MUSEs, “giving individual attention to students” and “diagnosing learning problems of students” ranked first and second in importance. On the other hand, teachers in the control schools ranked “insuring that students learn basic skills” first, followed by “developing student ability in analytical reasoning and problem-solving” (Klausmeier et al., 1971a, pp. 11-12; Pellegrin, 1970b, p. 9).

Statewide Mobilization: IGE Gains Momentum

The formal working relationship between the R & D Center and the Department of Public Instruction in Wisconsin had been established in 1967 by the sharing of a liaison officer between the two agencies. This officer was to assist in disseminating programs developed and demonstrated by the Wisconsin Center (Rebeck, 1977, p. 84).

In the spring of 1968, a joint committee consisting of personnel from both the Center and the Department of Public Instruction evaluated the multi-unit concept for its potential for enhancing educational opportunities for students in Wisconsin. Following this evaluation (Rebeck, 1977, pp. 84-85; Walter et al., 1975, p. 27), the State Department and the R&D Center made agreements with four Wisconsin teacher education institutions that would assist eight elementary schools in establishing a “lighthouse,” or demonstration project to determine the acceptance of the multi-unit concept in local schools, the feasibility of having the teacher education institutions assist schools in making the changeover to the multi-unit school, and to provide continuing assistance toward these ends. The goal was to present the design for the benefit of other elementary schools interested in individualized learning (Rebeck, 1977, pp. 84-85; Walter et al., 1975, p. 27). The multi-unit concept was found to be acceptable, and results showed that teacher education institutions could play significant roles in MUSE implementation. With

the establishment of “lighthouse schools,” the number of multi-unit schools in Wisconsin increased to 15 (Parker, 1977, p. 14; Rebeck, 1977, p. 84-85; Walter et al., 1975, p. 27).

The Superintendent of the Department of Public Instruction in Wisconsin, William Kahl, indicated the feasibility of the MUSE in his major address during an institute on IGE held in Madison November 2-5, 1970 – the first institute in a series held to assist in implementing IGE nationwide (Multiunit Newsletter, 1970, p. 8):

After careful consideration of various programs being offered throughout the nation today, we have selected the multi-unit school, developed by the Research and Development Center for Cognitive Learning, University of Wisconsin, as having the greatest promise as a facilitative environment for improving learning opportunities at the elementary school level. This design meets all the criteria considered necessary if desired improvement is to be achieved. Within the unit structure provided, both the instructional and learning components support effective use of time, talent, and effort. Roles are differentiated and opportunities are provided for planning, sharing, and evaluation. Provision is inherent in the design to encourage cooperative effort in teacher education and research activities at the local educational level. (Multi-unit Newsletter, 1970, p. 8)

In the spring and summer of 1968, the State Department, in collaboration with local schools, assisted the Project MODELS staff in producing a series of 18 (training) videotapes³ and publishing the first guidelines for implementation that were based upon the experiences of staffs in the first seven IGE schools. These materials were developed for use by state education agencies, teacher education institutions, and other educational agencies interested in helping local schools make the changeover to IGE. These prototype materials, utilized until 1971 (Klausmeier et al., 1966; Klausmeier, 1977, pp. 4-5; Walter et al., 1975, p. 54), were shared in workshops and summer-session courses on the University of Wisconsin-Madison campus for personnel from Wisconsin and several other states, including Illinois, Iowa, Minnesota, Ohio, and California. These workshops and courses focused primarily on preparing groups of principals and unit leaders to understand the concepts of IGE and then to assist their local school staffs in making the changeover to IGE (Walter et al., 1975, p. 54).

The State Department often reproduced and disseminated materials generated by the Center in instances where the State Department approved the materials for recommendation and promotion throughout the state (Minutes of Joint Committee,

³ Klausmeier (1977) observed that the Project MODELS staff produced a total of 15 video tapes (p. 4) while Walter (1975) indicated a series of 18 videotapes (p. 54).

11/13/67 cited in Rebeck, 1977, p. 85). Individually Guided Education in the Multiunit Elementary School: Guidelines for Implementation by Klausmeier, Morrow, and Walter (1968) was one of these publications (Rebeck, 1977, p. 85).

The combination of supportive inputs from the Department of Public Instruction, local schools, teacher educators, and R&D Center staff had three results; “(1) the identification of both the least desirable characteristics and the beneficial outcomes of the age-graded, self-contained form of schooling; (2) the synthesizing of these concerns and relevant research and theory into the system of IGE; and (3) the construction of the basic framework for the implementation of IGE” (Walter et al., 1975, p. 27). Especially, the third result came out as the establishment of the first informal state network of institutions supporting or facilitating the innovation. With the addition of facilitating environments, the term “multi-unit school” appeared less suitable for the total innovation. Herbert Klausmeier, Mary Quilling and James E. Walter at the R&D Center then invented “Individually Guided Education” as an alternative name (Saily & Rossmiller, 1976, p. 218 cited in Parker, 1977, p. 14). Individually Guided Education was the title given to the collection of concepts and strategies that was emerging from the work done together by the R & D Center and experimental schools. The term was created as a result of a series of gatherings in 1968 among Center, State Department, and school personnel. The title “individually” reaffirmed the R&D Center’s concern for individualized instruction; “guided” was selected to delineate the interaction between student and teacher in the instructional process; “education” was discussed longer than the other two words, but finally was accepted to indicate more than the formal instruction a child receives at school (Rebeck , 1977, pp. 82-83). Thus, the alternative model first named the Multi-unit School-Elementary (MUSE) came to be called Individually Guided Education in the Multi-unit Elementary School, and later, simply Individually Guided Elementary Education (IGE) (Klausmeier, 1990, p. 14; Rebeck , 1977, pp. 82-83).

As the appeals for dissemination of IGE increased, the Center moved away from its earlier intense emphasis on research and enlarged its emphasis on instruction. The Research and Instruction (R&I) unit was transformed to the Instruction and Research (I&R) unit – both (1) because of persistent claims from practitioners that the major function of the schools was to instruct and (2) from funding pressures which restricted

Title III monies to instructional purposes, but not to research purposes (Rebeck, 1977, p. 84).

Due to the collaboration among the Department of Public Instruction, teacher education institutions, and local school districts, 50 (or 51) more IGE schools were implemented in Wisconsin school districts in 1969-70 – 28 of these were fully organized and 23 were partially organized (Klausmeier, 21st Quarterly Report, 1969b, p. 2). A total of ninety-nine additional IGE schools were implemented in Wisconsin and 65 schools in seven other states⁴ in 1970-71, bringing the total to 164 schools in eight states (Klausmeier, 1972, p. 11; Klausmeier, Morrow, & Walter, 1968; Walter et al., 1975, pp. 13, 54). The stories of initiating MUSE/IPM in five Wisconsin elementary schools during the period of 1969-1971 will be described in the following Chapter 3.

Table 2.4 summarizes information concerning MUSE components in Wisconsin for each academic year, 1965-1966 through 1970-1971, and the estimated number of MUSEs in other states as well. It is of note in Table 2.4 that the number of I&R units and the number of schools with operating IICs had roughly doubled each consecutive school year, starting with 1967-1968. In addition, there was some attrition between 1966-1967

Table 2.4
Multi-unit Elementary Schools, 1965-1970

Year	No. I&R units	No. Schools in Wis.	No. Wis. Schools with IICs	No. Wis. School Systems Involved	No. Out of State Schools
1965-66	13	10	--	4	--
1966-67	23	14	--	6*	--
1967-68	30	9	6	4	--
1968-69	55**	21	8	9	3**
1969-70	139	51	26	23	35**
1970-71	283	99	65	49	65**

Source: Reprinted from The Development and Evaluation of the Multiunit Elementary School, 1966-1970 (Tech. Rep. No. 158) (p. 8), by H. J. Klausmeier, M. R. Quilling, and J. S. Sorenson, 1971, Madison, WI: Wisconsin Research and Development Center. Copyright © 1971 by The Regents of The University of Wisconsin for the Wisconsin Research and Development Center for Cognitive Learning.

*Two systems with three MUSEs temporarily discontinued unit operations, but reinstated them in succeeding years; in a third system, two MUSEs were discontinued.

** Estimated. Exact figures not available. The number 65 of 1970-71 represents seven states.

⁴ These states include Colorado, Iowa, Ohio, Oregon, Minnesota, and New York; one state is unknown.

and 1967-1968, basically because the establishment of the multi-unit schools in the 1967-1968 school year was completed in some cases by transferring unit personnel from several buildings to the multi-unit building. In the process, some units reverted to self-contained classrooms. Two school districts that had dropped five units in 1967-1968 later reinstated them and in 1970-1971 were operating several MUSEs (Klausmeier et al., 1971a, pp. 7-8).

Joint Project with /I/D/E/A/

On June 19, 1969, an agreement was made between the University of Wisconsin and the Institute for Development of Educational Activities, Inc. (/I/D/E/A/):

To grant to /I/D/E/A/, Inc., non-exclusive rights for the development and distribution of printed, filmed or tape or videotape recorded materials to the Multiunit Concept of Elementary School Organization...produced by the UNIVERSITY through its Research and Development Center under contract N. OE5-10-154 from the U.S Office of Education (Agreement, 6/19/69 cited in Rebeck, 1977, pp. 90-91).

After the agreement, /I/D/E/A/ contracted with a Chicago multi-media firm, "Take Ten, Inc.," to publish inservice materials: four films, seventeen filmstrips and three books for training IGE facilitators and practitioners (Parker, 1977, p. 75). The firm and /I/D/E/A/ edited the prototype materials offered by the Center to make the information on IGE clearer in form and presented in terms understood more easily by practitioners, and more inclusive of concepts developed by /I/D/E/A/. These inservice materials were published between 1970 and 1972 with the program name being Individually Guided Education and a copyright logo established for IGE (Parker, 1977, p. 24).

This agreement, however, did not reflect precisely what the two parties evidently had wanted. The Center desired an opportunity for disseminating its products; /I/D/E/A/ wished to disseminate good educational innovations to local schools. And each aspired to its own integrity. Eventually, "perceived delays, conceptual differences, recognition questions, and ownership" engendered a progressive dissolution of the working relationship between the two parties (Rebeck, 1977, p. 92). The immediate cause for disintegration of this agreement was a change in dissemination policy by /I/D/E/A/. Contrary to an early suggestion (Sava to Klausmeier, 5/1/69) that there would be no training prerequisites for acquisition of materials, during 1971-72 /I/D/E/A/ adopted an

implementation strategy which involved a “Memorandum of Agreement” between /I/D/E/A/ and the “Intermediate Agency” such as colleges of education and state education departments. Within this agreement were conditions for /I/D/E/A/ to sanction the Intermediate Agency to implement IGE in chosen schools, the director of the agency to participate in particular /I/D/E/A/ sponsored workshops, and for /I/D/E/A/ to sell the IGE materials to the agency and to the schools appointed by the agency. Since the Center policy was to make information available to anyone who requested it (required of any research center affiliated with the U.S. Office of Education), the differences between the two parties became irreconcilable. On August 28, 1972, Samuel Sava of /I/D/E/A/ wrote a letter to Herbert Klausmeier, ending the June 1969 agreement; Klausmeier’s September 8, 1972 letter confirmed the ending (Rebeck, 1977, pp. 92-93).

The R&D Center responded to the termination by upgrading its earlier guide and videotapes, connecting them with IGE curriculum and instructional materials in reading, mathematics and “individually guided motivation.” Both parties then initiated major projects to develop a second generation series of materials (Parker, 1977, p. 75).

Ultimately, this short-lived collaboration served to make IGE more prominent. The arrangement furnished some dissemination possibilities that the Center had not been capable of on its own, and the name IGE itself became more wide-spread than ever before (Rebeck, 1977, p. 93).

Completion of the Seven-component IGE System

Two of seven components of IGE that had been developed through Project MODELS, the multi-unit school and an instructional strategy, referred to as an instructional programming model (IPM) for the individual student, were functioning fairly well in schools in four Wisconsin districts by 1967-68 (Klausmeier, 1990, p. 14). Aided by educational practitioners, Klausmeier and his Center teams began inventing the other five components and carrying out research related to them that same year. One component involved curricular/instructional programs. As of 1967-68, programs in reading, mathematics, pre-reading, and motivation were in their initial stages of development. Evaluation, a fourth component, was being developed in conjunction with

the curricular programs, while facilitative environments, a fifth, was added after the establishment of the informal state network of IGE institutions in Wisconsin. The remaining two components of IGE were a program of home-school-community relations and continuing research and development. Thus, the initial seven-component IGE system was completed by 1971 (see Chapter 1). The Center, however, had not carried out systematic research and development with regard to any of these last three elements as of the 1971-72 school year (Klausmeier, 1972; Klausmeier & Associates, 1990, p. 14; Klausmeier, Rosmiller, & Saily, 1977).

Between 1972 and 1977, the Center continued its research and development activities with respect to the new five components in an effort to refine them. Especially, the Center proceeded with the development of the four curricular/instructional programs that it had initiated earlier and concluded during the five-year period 1972-77. These programs included “Developing Mathematical Processes” (1976), “Wisconsin Design for Reading Skill Development” (1976), “Pre-Reading Skills Program” (1974), and “Individually Guided Motivation” (1974) (Klausmeier et al., 1990, p. 14-15).

With the support from the R&C Center and the Department of Public Instruction, a number of Wisconsin local school systems were introduced to IGE and sometimes made decisions to adopt IGE in their school buildings. Case studies in the following chapter describe the processes of mobilizing MUSE/IPM in five local schools in Wisconsin and their major decision makers on the adoption of MUSE/IPM.

PART TWO

**THE MOBILIZATION FOR
THE MULTI-UNIT SCHOOL-ELEMENTARY
AND THE INSTRUCTIONAL PROGRAMMING
MODEL, 1969-1971**

Chapter 3 Five Schools Adopting MUSE/IPM, 1969-1971

As shown in the previous chapter, the Wisconsin Department of Public Instruction took on responsibility for the state-wide demonstration-installation- and maintenance of MUSEs during the 1968-69 school year (Klausmeier et al., 1971, p. 8; Klausmeier, 1977, p. 4). Due in large part to this mobilization, the number of schools that initiated MUSE/IPM increased in Wisconsin. However, the pattern of MUSE/IPM initiation varied school by school. This chapter describes five case studies of IGE schools in the phase of mobilization with respect to the *content* and *process* of mobilization. Drawn from Barrows, Klenke, and Heffernan (1979), this chapter displays the attempts to mobilize for MUSE/IPM and the locus of formal decision on the adoption of MUSE/IPM in different schools in Wisconsin: Jefferson School, Davis School, Sawyer School, North School, and Rise School.¹ The first school is characterized by “opportunism” with a unilateral decision; the following two by “top-down support” with unilateral decisions; and the remaining two schools by “broad-based support” with joint decisions.

Opportunism: Jefferson Elementary School, Wisconsin

In 1969, Jefferson School was one of several outlying elementary schools in a small southern Wisconsin school district. It was a relatively small elementary school, serving approximately 125 students. The district’s K-12 organization accommodated approximately 2,000 students. The hub of the educational system was located in the district’s largest community where an elementary school and the junior and senior high schools formed one large educational complex. The several outlying elementary schools were located in the rural areas of the school district (Barrows, Klenke, & Heffernan, 1979, p. 130).

In 1968, the Board of Education, for a variety of reasons, made the decision to close two of the smaller outlying elementary schools. The approximately 100 students attending the two schools were to be transferred to Jefferson Elementary. In order to accommodate the incoming students at Jefferson, an addition, incorporating the pod

¹ All names appearing in this chapter and the following chapters presenting case studies are pseudonyms.

design, was built. Students were to be bussed to their new location at Jefferson. Since the district encompassed nearly 100 square miles, bussing of students, particularly in the outlying rural areas, was not uncommon (Barrows et al., 1979, p. 130).

During the time that the district was involved in working with the contractors to complete the addition to Jefferson Elementary and making plans to transport the displaced students, the district superintendent, Ralph Barrett, and the principal of the three outlying elementary schools, Brent Chase, were enrolled in a course at University of Wisconsin-Chevron. The course provided an introduction to IGE. These events provided the backdrop for the adoption of IGE at Jefferson Elementary (Barrows et al., 1979, p. 131).

The building project, according to Barrett, stimulated the consideration of an educational alternative at Jefferson. Chase, then principal of Jefferson Elementary School, with Barrett's approval decided that IGE would be implemented by those teachers housed in the new addition at Jefferson Elementary. Barrett supported the decision because he saw IGE as a "mechanism by which teachers could better individualize instruction and provide learning related to student needs rather than to a prescribed norm." IGE, according to Barrett, also provided flexibility within its organizational structure. Chase, however, reported that a lack of convincing data to support IGE claims and a basic lag in teacher education were two disadvantages to providing IGE as an alternative at Jefferson Elementary (Barrows et al., 1979, p. 131).

Involvement in the decision to adopt IGE was limited to Chase and Barrett. Teachers and parents were not consulted in any of the events prior to the decision. As described by one observer on staff at Jefferson during the time the decision was announced, "Teachers were not consulted – we didn't volunteer (to teach at the IGE school), we were drafted... I mean, this is it, you're here and you're part of the program whether you like it or you don't like it...we were told, you do it this way and that's it..." No background information was provided prior to the actual in-class implementation of IGE, nor were teachers consulted regarding such procedures as teaming (Barrows et al., 1979, pp. 131-132).

Between the announcement that the teachers in the new addition would implement IGE and the time of the arrival of students from the two elementary schools

being closed, Chase held several meetings to introduce IGE to the staff. The meetings were reported to be largely frustrating since Chase didn't seem to listen to or care what teachers thought. One Friday, in the spring of 1969, the two outlying schools were closed. The following Monday, as described by one teacher, "when it was all mud and wet," the new students and teachers arrived at Jefferson, only to find all the student materials, books, and so on, "dumped in a pile in the middle of the floor." Such was the beginning of IGE at Jefferson Elementary School (Barrows et al., 1979, p. 132).

In sum, the principal and the central office made the formal decision to adopt IGE at Jefferson School, while teachers and parents were not involved in any of the events prior to the decision. Teachers had no background information prior to the actual implementation of IGE, nor were teachers consulted regarding such procedures as teaming. Thus, "opportunism," with a unilateral decision, characterizes the phase of mobilization at Jefferson School. A school like Jefferson tended to fall into a group that was known to have adopted IGE, but did not implement MUSE/IPM at all, accounting for between 62 and 87 (22% to 30%) of 287 IGE schools during the phase of implementation (Ironsides, 1972, p. 14).

Top-down Support: Davis Elementary School, Wisconsin

Avon was a city of approximately 5,000 residents with several small industries. Its reputation as a "good place to live" might have accounted for its steady increase in population. Most residents commuted to employment in one of several larger nearby cities (Barrows et al., 1979, p. 148).

The Avon Public School District served more than 2,000 students in grades K-12. Students were housed in four elementary schools, one junior high school, and one senior high school. With the exception of two small outlying elementary schools, all were located in the city of Avon (Barrows et al., 1979, pp. 148-149).

As described by administrators, prior to the adoption of IGE, the educational program in the Avon schools was extremely stable: "Teachers were doing the same thing, thinking the same way as they had for the previous ten, fifteen, twenty years since they had been in the elementary program. Avon was no better and no worse than any small town in terms of education. It was a cigar box, egg-crate kind of approach." Inservice in

the district was lacking, and there was little curricular coordination among the four elementary schools. Administrators reported a need to strengthen the elementary program and to pull its fragmented sections together. According to the superintendent, the district was "...ripe for some new innovation" (Barrows et al., 1979, p. 149).

These conditions in 1967 provided the environment for events that ultimately led to the adoption of IGE at Davis Elementary in 1971. The events began when the superintendent discussed his concerns about the lack of change in the district and the need for updating with two of the district's elementary principals. In that discussion, non-gradedness was suggested as a possibility for the district. One of the principals had become familiar with the concept of non-gradedness through his master's work. With the superintendent's support, he organized an inservice on non-gradedness for the district staff during the 1967-68 school year. Follow-up visits by district teachers to non-graded schools were also arranged and conducted during the same year (Barrows et al., 1979, p. 149).

While non-gradedness was being explored in Avon, a neighboring school district was receiving considerable publicity about its success with IGE. The superintendent of Avon learned about IGE through discussions with that district's superintendent. In addition, the Avon superintendent was enrolled in an advanced degree program at the University of Wisconsin and became acquainted with several faculty members associated with the Wisconsin R&D Center. Because of his desire to change his school system, his knowledge of success with IGE in another district, and his informal contacts, the Avon superintendent pursued the ideal of bringing IGE to his district (Barrows et al., 1979, p. 150).

While the administrative perception of the district prior to adoption suggested a stable district ripe for change, the teachers' recollections indicated no such readiness. Unaware of any ongoing issues or concerns in the district prior to adoption, teachers indicated only that IGE was introduced by central administration, the assistant superintendent in particular (Barrows, Klenke, & Heffernan, 1979, p. 150).

Not only did the perceptions of the district prior to adoption differ between administrators and teachers, but the perceived advantages of the innovation differed as well. For administrators, the advantage of IGE was in the potential for better staff

utilization. Specifically, the administrators expected that the new organizational arrangement would allow for team teaching, make substitute teachers unnecessary, and encourage teachers to view children as individuals. Further, the administrators viewed the inservice arrangement associated with IGE as a way to counteract complacency among teachers (Barrows et al., 1979, p. 150).

While administrators stressed organizational and staff development advantages, many teachers emphasized benefits for children. For example, one teacher said that IGE would “allow students to work at their own pace,” while another said that he hoped that under IGE, “each child would be met at his own level and that level would increase at a higher rate than students in traditional or departmentalized classrooms.” Still another teacher believed that IGE offered the advantage of “individualizing over the whole school rather than just one classroom” (Barrows et al., 1979, p. 151).

Initial concerns about IGE were, for administrators, linked to demonstrating its value to the community, reporting progress to parents, illustrating IGE’s superiority to other teaching methods, and alleviating parental fears about the new program. Most teachers indicated that they had no reservations about IGE at the time. Some felt it was “new” and “exciting”; others reported adopting a “wait-and-see approach” (Barrows et al., 1979, p. 151).

In the fall of 1970, the high school principal became the new assistant superintendent and “he was the person who set all the machinery into gear.” He provided inservices for the staff at Davis and served as a resource for the school’s principal, who was also newly hired. To increase his own understanding of IGE, the principal of Davis attended an one-week inservice for principals that fall and made several visits to IGE schools (Barrows et al., 1979, p. 152).

In early 1971, several open meetings were held by the school board at which the IGE philosophy was discussed and district parents and teachers were invited to attend these sessions. As one administrator recalled, “We did not go into it necessarily from a central office decision kind of a thing...but rather we let people know what we were thinking about prior to our signing the [IGE] contract” (Barrows et al., 1979, p. 151).

Though administrators described the school board as basically conservative, they also characterized the board as interested in promoting education. The superintendent,

assistant superintendent, and one principal reportedly sold IGE to the board by emphasizing the potential for better staff utilization (Barrows et al., 1979, p. 151).

Formal adoption of IGE was signaled by the signing of a contract by the Avon School Board, the Wisconsin R&D Center, and Department of Public Instruction in mid-1971. Prior to the contract signing, however, the district had been involved with certain aspects of IGE. An inservice on non-gradedness had been held in the district during the 1967-68 school year. Also, the Wisconsin Design for Reading Skill Development had been piloted in the spring of 1971 by the third and fourth grade teachers at Davis Elementary (Barrows et al., 1979, p. 152).

Costs for implementation were incurred in the purchase of materials, staff inservice, and the hiring of aides. Additionally, some building renovation was necessitated by the adoption of IGE. The school library was expanded, updated, and centralized and its function was changed from a depository of books to a center for a wide variety of instructional materials and media. One administrator reported that the initial cost to the district was \$4,000. He added, "There was really no major expense. That's one of the reasons that the board bought it" (Barrows et al., 1979, p. 152).

A wide range of problems was encountered in preparing for the implementation of IGE. The nature of the problems varied with the roles of the individuals. For example, those in the central office listed staff resistance as the major problem. Staff resistance took several forms – discomfort of some teachers at being observed by others, preference for the traditional classroom, and concern from junior and senior high teachers that they might be expected to change, too. The principal and teachers cited different concerns. Manageability in terms of scheduling, moving children, and paperwork were problems for many. Several cited inadequate inservice and lack of knowledge as negative factors in the earlier days. And some felt that IGE was being forced on them by central office administrators. As one individual commented, "The assistant superintendent was working on a Ph.D. related to IGE, and he was unwilling to give us adequate time to prepare for adoption." Another remarked, "The program was ramrodded on us." Lack of materials was problematic as well in the first year. Some parts of the Wisconsin Design in the developmental stages were often not ready when the teachers needed them. At times, they

were forced to “march in place” while waiting for the arrival of these materials (Barrows et al., 1979, p. 153).

In the spring of 1972, the first and second grade teachers at Davis formed a unit and began using the study skills component of the WDRSD. At the same time the 5-6 unit departed from their departmentally organized afternoon instructional program and attempted the IPM in science and social studies. By the end of the 1971-72 school year., the entire school was organized into a multiunit structure with grades 1-2 using the IPM in reading, grades 3-4 using the IPM in reading and math, and grades 5-6 using the IPM in all subject areas. IGE at Davis School had begun (Barrows et al., 1979, p. 153).

In sum, central office was the locus of formal decision making in the adoption of IGE at Davis Elementary, and the decision was unilateral. While some teachers approved of IGE after being acquainted with the program, teachers as a whole were not involved in the adoption decision. Thus, “top-down support” with a unilateral decision characterizes the phase of mobilization at Davis Elementary School. A school like Davis tended to fall into a group that would later be called “nominal” IGE schools in the phases of implementation and continuation (Romberg, 1985), accounting for more than 40% of 287 schools during the phase of implementation (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972).

Top-down Support: Sawyer Elementary School, Wisconsin

Trivers City was a small but growing city of approximately 50,000 residents. It was rapidly becoming a major center for retail trade and industry, education, and health and professional services. Within the city were several major industrial concerns that employed over 3,500 local residents in the production of paper and machine parts. In addition, there were numerous stores, restaurants, hotels, and shopping centers providing employment. Governmental agencies, a University of Wisconsin campus, and three hospital facilities also employed many local residents (Barrows et al., 1979, p. 133).

Trivers City School District had an approximate student enrollment of 10,000 housed in 20 elementary, three junior high, and two senior high schools. There were also eleven private or parochial schools in the area enrolling over 5,000 students (Barrows et al., 1979, p. 133).

Since the Trivers City area was increasing in population, both the administrators and school board were concerned about the adequacy of educational facilities at that time. Thus, building additions to both high schools and several elementary schools, and the construction of a new junior high school were placed on a referendum for voter approval (Barrows et al., 1979, pp. 133-134).

Selection of sites for school additions became an issue in the community. For the most part, residents around each potential school site had their reasons why an addition should not be put on their neighborhood school. Most reasons revolved around the idea of maintaining a small number of students in a school. Several other considerations entered into the site selection: children crossing a major highway, constructing an addition on a school in an over-populated area, and the maintenance of the neighborhood school concept (Barrows et al., 1979, p. 134).

Sawyer School was a one-story building built in the 1950's. An addition to the building in the late 1960's added enough classroom space to house two classes at each level from kindergarten through sixth grade. The interior of Sawyer School could be described as a large, solid rectangle. Classrooms were located on the outer walls, along with a multipurpose room. The school office, the IMC, and specialist offices were located in the center of the building (Barrows et al., 1979, p. 134).

Prior to the adoption of IGE, Sawyer was described as a traditional, age-graded, self-contained classroom school. Teaching was highly structured and organized around textbooks. Each teacher was responsible for teaching all the subjects, including art, music, and physical education. The school also had only one teacher per grade level, kindergarten through sixth. The adoption of IGE occurred when the 1969 school addition was completed (Barrows et al., 1979, p. 134).

During the late 1960's, IGE in the Trivers City area was growing. Through the efforts of the State Department of Public Instruction and the University of Wisconsin-Trivers City (UW-Trivers City), several schools were established as model IGE programs. In an effort to increase the number of IGE schools, several IGE awareness conferences, conducted by UW-Trivers City staff, were held in Trivers City. An invitation to implement IGE was offered at each session with the guarantee that UW-Trivers City staff would provide necessary technical assistance. Several Trivers City

School District staff members attended these sessions and were aware of the assistance available through UW-Trivers City (Barrows et al., 1979, p. 135).

In 1969, Robert Sparks, the state IGE coordinator, initiated a meeting with Glenn Black, the superintendent of Trivers City School District. The purpose of the meeting was to solicit the district's participation in statewide efforts to implement IGE. Although no commitment was made at that point, neither was Sparks's invitation turned down. Three district administrators: Herbert Hart, assistant superintendent; Gloria Schubert, supervisor of curriculum and instruction; and Betty Keen, elementary supervisor, attended a follow-up meeting to gain additional information about IGE. It was on the return trip to Trivers City that the decision was made to implement IGE in several district schools (Barrows et al., 1979, p. 135).

Following their return to Trivers City, two criteria were established to select the schools to implement IGE: socioeconomic balance and reading scores. Sawyer School was selected because it represented the "middle income" socioeconomic level found in the community. A second school was chosen because it represented the higher socioeconomic level. A third school, representing the lower-socioeconomic level and low-standardized reading scores, was also selected. Each building principal was contacted and asked to participate. Black, Hart, Schubert, and Keen were concerned about teacher resistance but they relied on the principals to cope with the resistance if it was a problem. Paul Ulrich, principal of Sawyer School, was contacted and subsequently agreed to participate (Barrows et al., 1979, pp. 135-136).

Ulrich, in the spring of 1969, informed the staff of his decision to have Sawyer School participate in the district's implementation of IGE. He also informed the staff that those teachers not desiring to participate could transfer to another district school. The teachers reported that this was not a realistic alternative. New staff that were to be brought into the school because of the anticipated increase in student enrollment were "hand picked" for their desire to be in an IGE school. The staff, at the time the decision to become an IGE school was announced, was not extremely upset. Most were interested in IGE because of the opportunity they saw for meeting the needs of the students through IGE. The disadvantage the staff saw centered on the apparent amount of time it would take to implement the innovation (Barrows et al., 1979, p. 136).

During the summer of 1969, Paul Ulrich was transferred to another district elementary school. His old position was filled by Hugh Bayer. With the decision already made about implementing IGE at Sawyer School, it was necessary to train Bayer before the opening of the next school year. Thus, Bayer participated in a 3-week inservice program conducted by the Wisconsin Department of Public Instruction (DPI) (Barrows et al., 1979, p. 136).

The 1969 school year began with the addition complete, a larger student population and staff, and the start of IGE. The IGE effort at this time was confined to the upper unit (grades 4-6). Hugh Bayer, in addition to being building principal, also served as unit leader. This unit focused its efforts on improving the WDRSD. The staff considered themselves to be implementing IGE even though they maintained a departmentalized organization within an age-graded framework. The extension of IGE into the remaining grade levels was completed in the fall of 1970. As in the upper unit, the IGE efforts in the lower grades revolved around the implementation of the WDRSD (Barrows et al., 1979, p. 137).

During the 1969-70 school year, a League of IGE Schools was created under the leadership of UW-Trivers City. Sawyer School was a charter member of that League. In addition, the staff of Sawyer visited Dewey School, a model IGE school in a neighboring district. Dewey School was part of a statewide model school program and a member of the League. Betty Keen and Herbert Hart were also with the staff during the visit to Dewey School (Barrows et al., 1979, p. 137).

From the beginning of discussion in 1969, the district supported the IGE efforts. Expenses to release teachers to attend IGE inservice and related activities were provided by the district. Although the cost of providing aides and WDRSD materials occurred as a result of implementing IGE, these expenditures were, by district reports, considered normal when compared to the expenses of the other district schools employing aides. The major financial impact resulted from an agreement between the board and Trivers City Education Association whereby unit leaders received an additional 9% increase in salary. A grant was also received from the DPI that allowed the staff to develop a model IMC (Barrows et al., 1979, p. 147).

In sum, central office staff and the principal were the locus of the formal decision to adopt IGE, with “top-down support” and unilateral decision making characterizing this phase of mobilization at Sawyer School. Although teachers as a whole were not involved in the adoption decision, the majority of staff members were interested in IGE because of the opportunity they saw for meeting the needs of the students. In addition, the principal showed effective leadership by serving as a unit leader. A school like Sawyer tended to fall into a group that would later be called “low marginal” IGE schools (Romberg, 1985), accounting for, together with high marginal IGE schools, less than 20% of 287 schools during the phases of implementation and continuation (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972).

Broad-based Support: North Elementary School, Wisconsin

The Chevron Public School District served the students in one of the state’s larger cities. North School, the oldest school in the district, was one of more than 15 district elementary schools. Being the oldest district school, it had seen many additions. What had once been a traditional, self-contained, classroom structure now had several classroom wings, a gymnasium, and a multipurpose room (Barrows et al., 1979, p. 145).

Prior to the implementation of IGE, North’s instructional program was organized around grade-level, self-contained classrooms. Over 600 children were assigned to one of 20 teachers for classroom instruction. The fifth and sixth grade teachers had developed an individualized math program and cross-grouped for math instruction. Other than this, instruction at North was confined to each of the individual self-contained classrooms. The staff was reported to be satisfied with their situation and not seeking anything new or different. As one administrator described it, “We just wind the clock up at the beginning of the year and let it wind down” (Barrows et al., 1979, p. 145).

At the time of events that heralded the beginning of IGE at North School, IGE was not new to the Chevron School District. As far back as the mid-1960’s, Chevron School District and the Wisconsin R&D Center had established a partnership in research that investigated the problems confronting elementary education. This partnership resulted in the establishment of several R&I units (forerunners of the I&R units).

Subsequently, two of the original IGE schools were in the Chevron District (Barrows et al., 1979, p. 145).

Thus, in the spring of 1970, when Sid Malm, district program coordinator, held an IGE awareness meeting for district principals, IGE was presented as an alternative to the existing elementary program. Todd Menzel, principal of North School, was in attendance. He and four other district principals expressed an interest in exploring IGE. That summer Menzel attended a one-week IGE principals' workshop sponsored by the Wisconsin R&D Center and the Wisconsin Department of Public Instruction (DPI). Each of the participants received a stipend and IGE materials useful for explaining IGE to others, teachers in particular (Barrows et al., 1979, p. 146).

During the first semester of the 1970-71 school year, Menzel built awareness of IGE among his staff. During staff meetings, IGE was explained and its merits presented. In January 1971, Menzel identified several key teachers for IGE inservice. These teachers were released from classroom responsibilities to attend a three-day, principal-unit leader workshop sponsored by the R&D Center and the DPI. Upon their return, they shared their workshop experiences with other staff members (Barrows et al., 1979, p. 146).

A decision had to be made. Would North choose to implement IGE? The advantages, as reported by staff members, were the idealism of IGE, the theory behind its organizational structure, and its philosophy of individualized instruction. The reported disadvantages were more pragmatic; too much time required, lack of resources, and the need for strong teacher commitment. If there was any resistance to IGE, it centered on the practice of multiage grouping of students. In February 1971, the North School staff made the commitment, by majority vote, to implement IGE (pp. 146-147).

During the remainder of the 1970-71 school year, the entire staff increased their understanding of IGE by participating in four inservice workshops that were conducted by staff members of both the R&D Center and the DPI. During this time, parents were also informed about IGE and told what they and their children could expect when the school staff implemented IGE the following school year (Barrows et al., 1979, p. 147).

Throughout the time leading to the adoption of IGE at North School, the district supported North's efforts. They provided released time for inservice, substitute teachers, and materials for IGE training and classroom instruction. In addition, released time and

salary for unit leaders were also ensured. Without much difficulty, in September 1971, the beginning of a new school year, the staff of North School, now organized into four I&R units, began with a new program, IGE (Barrows et al., 1979, p. 147).

In sum, the principal and staff were the locus of the formal decision for adopting IGE. Although the principal played a larger role than the staff as compared to Rise School (see next case), both the staff and principal were involved in North's decision making. Teachers participated in training workshops and made commitments to implement IGE. At the same time, parents were informed about IGE. The school district provided released time for inservice, substitute teachers, IGE materials, and extra pay for unit leaders. The phase of mobilization at North School is thus characterized by "broad-based support" with joint decision making. In the history of IGE, a school like North tended to fall into a group that would be classified as "high marginal" IGE schools, accounting for, together with low marginal IGE schools, less than 20% of 287 schools during the phases of implementation and continuation (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972).

Broad-based Support: Rise Elementary School, Wisconsin

Tall Pines was a city with a population of approximately 50,000 residents. The area, characterized by a mixture of rolling wooded hills and flat fertile farmlands, included several rivers as well as numerous small lakes. These added to the recreational appeal of the Tall Pines area (Barrows et al., 1979, p. 139).

There were numerous small businesses in addition to several major industrial plants in Tall Pines. The principal shopping and business district was located in the center of the city with an adjacent industrial park. Several shopping centers were also scattered throughout the various neighborhoods (Barrows et al., 1979, p. 139).

The adoption of IGE at Rise School had a curious beginning. Back in the mid-1960's, two University of Wisconsin-Tall Pines professors, Tom Jackson and Lester Sell, were pondering the future of the School of Education. Beset by a variety of difficulties, the School of Education was making efforts to increase the involvement of students and area teachers in its activities. Both Jackson and Sell were convinced that the future of the School of Education lay in its ability to provide meaningful inservices for local teachers

(Barrows et al., 1979, p. 139). During this time, the dean of the School of Education attended a luncheon meeting at which an IGE presentation was given. Seeing the inservice possibilities in IGE, he discussed them with Jackson and Sell (Barrows et al., 1979, p. 139).

During the following year, 1970-71, the University of Wisconsin-Tall Pines' involvement in IGE grew. Robert Sparks, State IGE Coordinator, contacted the dean of the School of Education to solicit his support in providing assistance to Grover School, a school in a neighboring district that was implementing IGE. Jackson and Sell, upon request of the dean, agreed to help the school. During that year, they attended all of the IGE-related meetings at the school (Barrows et al., 1979, p. 140).

Other IGE activities became available. Jackson and Sell were invited to a unit leader training conference sponsored by the Wisconsin R&D Center. In addition, state funds were granted to the University of Wisconsin-Tall Pines and Singer University to jointly develop a unit leader course for the following academic year (Barrows et al., 1979, p. 140).

About the time that the University of Wisconsin-Tall Pines was increasing its involvement in IGE, restlessness among several teachers at Rise School was growing. Up to this point, Rise School functioned as a traditional, self-contained, age-graded school, where each teacher was responsible for classroom instruction within an assigned room. "There was no teaming whatsoever" was a description provided by one teacher when describing instruction and the collegial environment at that time. There were, however, several primary teachers concerned about the increasing number of non-readers. Their concern was sufficient to motivate them to search for ways of providing a more individualized reading program. Their search led to enrolling in Jackson and Sell's course on individualization being taught during the summer session of 1971 at the University of Wisconsin-Tall Pines. The teachers became interested in the innovation and contacted their principal to explain it to him. At their urging, Peter Larkin, who had been appointed principal of Rise School several months prior to the summer course, attended several classes and talked with the other class members and instructors regarding the feasibility of implementing IGE (Barrows et al., 1979, pp. 140-141).

The enthusiasm of the primary teachers generated during the summer course was sufficient to have them request permission of the principal to implement IGE in their grade levels that fall. It was decided that the first and second grade teachers would form an I&R unit during the first year. It was further agreed that the remainder of the staff would decide if they would adopt IGE the following year. This plan was presented to the entire staff and agreed upon. IGE implementors from the R&D Center, Department of Public Instruction, and the University of Wisconsin-Tall Pines recommended that Rise School not adopt according to their original plan. However, the school did adopt the plan, indicating that they were cognizant of the pitfalls of a segmented implementation but were taking necessary safeguards (Barrows et al., 1979, p. 141).

Teachers indicated a variety of advantages to IGE. The primary teachers believed that IGE would enable them to individualize instruction for children, especially in reading. They pointed to the fact that IGE is designed “to help reach those students that have unique learning needs.” Other advantages focused on a concern for individual learning needs and use of a variety of teaching methodologies. Practical applications of DMP such as grouping patterns, curricular materials to teach specific skills, and the recognition of different learning styles were also appealing advantages (Barrows et al., 1979, pp. 141-142).

Despite the obvious appeal of IGE, several disadvantages were identified. Some concern was expressed over the possibility of actually translating the theory of IGE into practice. There was also a concern over the amount of movement that appeared to come with IGE. The amount of time that would be needed to meet and plan together was also seen as a disadvantage (Barrows et al., 1979, p. 142).

Concurrent with Rise’s involvement in IGE, the LEAP League of IGE Schools was formed as a result of an agreement between the University of Wisconsin-Tall Pines and several local schools. The LEAP League was formed to provide technical assistance to those schools implementing IGE (Barrows et al., 1979, p. 142).

The fall of 1971 was an exciting time, especially in the primary unit at Rise Elementary. The primary unit was implementing IGE for the first time. Involvement in IGE revolved around the pilot testing of the Wisconsin Design for Reading Skill Development (WDRSD). Initial start-up costs were minimal because Rise School agreed

to pilot test specific WDRSD materials and received most of them without any charge. Any additional costs for materials and aides were absorbed by the Board of Education. Costs were not seen by the principal as more than what would normally be expended by a non-IGE school. During the first semester of the 1971-72 school year, the primary unit received technical and moral support, not only from the principal, but from staff members at the University of Wisconsin-Tall Pines, the Department of Public Instruction, and the LEAP League of IGE Schools. In addition, all teachers had the opportunity to visit other IGE schools. This was also the semester that five other Tall Pines elementary schools implemented IGE. In each of these cases, IGE was implemented schoolwide. The participation of Rise School and the five additional Tall Pines schools received Board of Education sanction when an agreement between the Department of Public Instruction and the Tall Pines School District was signed (Barrows et al., 1979, p. 142-143).

The spring of 1972 was important for the staff of Rise School. It was time to make a decision. Would Rise School extend IGE to the remaining grade levels or would IGE be confined to the primary unit? After discussing the experiences of the primary teachers and the advantages and disadvantages of IGE, a vote was taken. The vote was what the primary unit had hoped for: Rise School would, beginning with the 1972-73 school year, be an IGE school (Barrows et al., 1979, p. 143).

In the summer of 1972, a majority of the remaining staff members of Rise School enrolled in a summer workshop course similar to the one attended by the primary teachers the previous summer. With the experiences of the primary staff, the visits to other IGE schools, the addition of a new math program, DMP, and the help from the University of Wisconsin-Tall Pines, the school began the 1972-73 school year implementing IGE schoolwide (Barrows et al., 1979, p. 143).

In sum, the staff and principal were the locus of the formal decision on the adoption of IGE at Rise School. Rise was unique in that the staff was looking for an individualized reading program, attended the summer course of 1972, and requested permission of the principal to implement IGE. In addition, Rise received technical and moral support from the University of Wisconsin-Tall Pines, the Department of Public Instruction, and League of IGE schools. The phase of mobilization at Rise School is thus characterized by “broad-based support” with a joint decision. In the history of IGE, a

school like Rise tended to continue as well as implement MUSE/IPM, eventually to be called a “true or actual” IGE school (Romberg, 1985), although they modified the prototypic MUSE/IPM model developed by the Center. IGE schools like Rise accounted for less than 20% of 287 schools in the phases of implementation and continuation (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972).

Chapter 4

Nationwide Mobilization for the Dissemination and Adoption of MUSE/IPM, 1971-73

Case studies of Jefferson Elementary School, Davis Elementary School, Sawyer Elementary School, North Elementary School, and Rise Elementary School have established that three patterns of support – “opportunism,” “top-down support,” and “broad-based support” – characterized the phase of mobilization of MUSE/IPM.¹ It is of note that “top-down support” dominated over “broad-based support” during this phase. How typical were these instances of what was happening elsewhere in the nation with respect to the *content* and *process* of mobilization? This chapter describes the Center’s efforts to mobilize for MUSE/IPM nationwide by signing contracts with the agencies legally responsible for education in ten states seeking engagement in IGE implementation efforts. Next, this chapter displays the extent to which the local school districts made adoption decisions on MUSE/IPM, established district governing groups, had policies and activities supportive of MUSE/IPM implementation, and participated in training activities. This chapter also explores the level of participation by school personnel in diverse training programs for starting MUSE/IPM, followed by a section on the key factors in the phase of mobilization for MUSE/IPM.

Selection of MUSE/IPM for Nationwide Dissemination

The major impetus for the nationwide mobilization of MUSE/IPM came from a federal agency, i.e., the United States Office of Education (USOE). This fact explains a large part of the top-down MUSE/IPM adoption as well as part of MUSE/IPM implementation and continuation phenomena.

In January 1971, Secretary of the U.S. Department of Health, Education, and Welfare, Elliot Richardson, announced the selection of the multiunit school for nationwide installation (Klausmeier, 26th Quarterly, 1971b, p. 1). The R&D Center presented “Project Plan and Budget Requests for the Nationwide Installation of Multiunit Schools (1971)” to the United States Office of Education through three meetings held in

¹ The other pattern – “localized support” – was also found in other cases, but was not represented in Chapter 3.

Washington, D.C. from January through March, 1971 (Klausmeier, 1972; Klausmeier, Appendix A to 26th Quarterly Report, 1971b; Klausmeier & Associates, 1990, p. 16; Lins & Klausmeier, 1977, p. 12; Walter et al., 1975, pp. 13. 54). During these meetings with National Center for Educational Communications (NCEC), National Center for Educational Research and Development (NCERD), Bureau of Education Professions Development (BEPD), and Bureau of Elementary and Secondary Education (BESE) officials, a strategy, timetable and budget were described by R&D Center officials for initiating, maintaining, refining, and institutionalizing multiunit schools, 1971-1976. The strategy included four phases – awareness, first-phase installation, maintenance-refinement, refinement-institutionalization -- and the first timetable spanned from April 1, 1971 to May 31, 1972 (Klausmeier, 26th Quarterly, 1971b, p. 1). In March, 1971, the Center was awarded a grant from the Office of Education (OE) to accomplish four phases of the installation effort (p. 78). It was also assured that the OE would fund the effort at least at the same level for fiscal year 1972 (Klausmeier, 1971; Klausmeier, 26th Quarterly, 1971b; Klausmeier, 1972; Klausmeier & Associates, 1990, p. 16; Lins & Klausmeier, 1977, p. 12; Walter et al., 1975, pp. 13. 54).

“The Project Plan and Budget Requests” submitted to USOE for the implementation funds were presented with two primary deliberations. First, implementation would be executed in view of a particular model of implementation comprised of the four phases mentioned above. This model would later be refined into five phases later on: awareness, commitment, changeover, refinement, and renewal (Evers, Karges, & Krupa, 1975). Second, the agencies legally responsible for education in each of the states would be engaged in implementation efforts. Thus, state education agencies were principally responsible for helping schools make the changeover to IGE, and chosen teacher education institutions were responsible for holding institutes and developing academic-year, graduate-level programs for experienced IGE personnel, especially principals, unit leaders, and reading staff teachers (Walter et al., 1975, p. 28). This second deliberation was based on the proof that forming relationships with and among the agencies legally responsible for particular educational functions was successful in Wisconsin (Walter, 1975, p. 27).

With funding granted in 1971 and 1972 by the National Center for Educational Communications, the Bureau for Professional Educational Development, and later the National Center for Educational Research and Development of the USOE, the R&D Center established subcontractual relationships with state education agencies (See Appendix A for formal agreements at national, state, and district levels) in nine states to start 20-50 MUSE/IPM (or IGE/MUS-E in words used at that time) schools in each state (Lins & Klausmeier, 1977, p. 12; Walter et al., 1975, p. 29) and a teacher education institution in one state (California), for a total of ten states (Walter et al., 1975, p. 28).² Informal relations were also established with local school districts in Lincoln, Nebraska; Fairfax County, Virginia; the Merrimack Education Center in Chelmsford, Massachusetts; and the State University College at Fredonia, New York. Technical support, without fiscal assistance, was offered to these sites (Walter et al., 1975, p. 28).

The previous years' experiences of working collaboratively with representatives from the DPI, local school districts, and teacher education institutions in Wisconsin provided the R&D Center with the basis for resembling activities in these states (Walter et al., 1975, p. 28). With these funds, approximately 280 new schools were established in 13 states, bringing the total number of IGE schools to 444 in 1971-72. These installations proceeded in collaboration with ten state education agencies, seven teacher education institutions³, and four other implementation agencies (Klausmeier, 27th Quarterly Report, 1971c, p. 2; Klausmeier, 8th Annual Report, 1972c, p. 20; Walter et al., 1975, p. 31).

Nationwide Installation Model: Four Phases

The model of nationwide installation activities called for its execution in a sequence of four phases: awareness, first-phase installation, maintenance-refinement, and refinement-institutionalization (Klausmeier et al., 1971b, p. 78). The following section starts with the description of awareness phase.

² California, Colorado, Connecticut, Illinois, Indiana, Minnesota, New Jersey, Ohio, South Carolina, and Wisconsin.

³ University of Wisconsin-Madison, University of Wisconsin-Milwaukee, University of Wisconsin-eau Claire, University of Wisconsin-LaCrosse, Marquette University, University of Hartford, and University of Toledo (Klausmeier, 8th Annual Report, 1972, p. 20; Walter et al., 1975, p. 31).

Awareness

This phase was accomplished during the 1970-71 school year. In late June, 1970, the Center received funds (a small contract of \$30,000) from USOE's National Center for Educational Communications to disseminate information nationwide about Individually Guided Education in the Multiunit Elementary School (Walter & Horn, 1972b cited in Walter et al., 1975, p. 28). The efforts for this awareness phase consisted of a two-stage, direct-mail effort followed by five regional one-day awareness conferences (Walter et al., 1975, p. 28). First, printed materials describing the products were sent to a nationwide 20 percent sample of elementary school principals (N=30,000) (Klausmeier, 26th Quarterly, 1971b, pp. 2, 7). A series of one-day informational conferences followed in spring, 1971, in Washington, D.C.; Atlanta; San Francisco; Lincoln, Nebraska; and Madison, Wisconsin (Klausmeier, 1972c, 8th Annual Report, p. 20). The principal target group was building principals. A small number of personnel from state departments of education, school district offices and teacher education institutions were invited as well (Klausmeier et al., 1971b, p. 78). These sessions were led by R&D Center implementation team personnel and offered to intended IGE schools as listed by each of 13 newly appointed state IGE coordinators (Davis et al., 1979, p. 42). On top of this effort, the Office of Education encompassed the multiunit elementary school in its nationwide traveling exhibit (Klausmeier et al., 1971b, p. 78). Those conferences, along with the OE exhibit, provided the basis of interest for the following implementation endeavors in the ten states (Walter et al., 1975, p. 28).

First-year installation activities

In 1971-72, multiunit schools were expected to be initiated through a sequence of four steps:

1. A one-day workshop for administrators and central office personnel.
2. A three-day workshop for principals and prospective unit leaders.
3. A three- to five-day pre-opening of school workshop for each entire building staff.
4. Four half-day inservice sessions for entire building staff. (Klausmeier et al., 1971b, p. 79)

R&D Center installation teams were to conduct the workshops described in steps 1 and 2 above in view of the Wisconsin model of inservice training until the state or regional

coordinator was ready to conduct them, generally in the second year (Klausmeier et al., 1971b, p. 79).

The objective of the one-day workshop was to help state department and central office personnel develop an awareness of MUSE/IPM. It was reasoned that chances for success at the building level would be greater when a commitment was made at the system level. A second objective was to discuss and elucidate the written agreement between the Center and implementation agencies as well as the written agreement between the state implementation agency and the local schools (Klausmeier et al., 1971b, p. 79).

In turn, school personnel who participated in the first two workshops described above would conduct a three- to five-day pre-opening of school workshop, and state education agency personnel would conduct four half-day inservice training sessions during the school year for the whole staff of the school building (step 3 and 4 in the first-year installation sequence) (Klausmeier et al., 1971b, p. 83). In addition to these school-based efforts, the Center staff would conduct an on-campus, one-week session to prepare personnel from cooperating state departments of education, teacher education institutions, and other supporting agencies to execute the antecedent installation activities and the maintenance-refinement program which would follow. In view of this phase, the Center would train Center implementation teams to collaborate with educational agencies of chosen states, and subcontract the services of each state educational agency to coordinate and offer some of the inservice training. Services would be contracted in accordance with the roughly estimated number of MUSEs installed and the measure of effort required to initiate them. The number of states would be restricted by the amount of funding granted to the Center (Klausmeier et al., 1971b, p. 83).

Maintenance-refinement

Field testing by the Center staff in 1970-71 indicated that a number of MUSE personnel had not thoroughly mastered the program's concepts and were deficient in major skills. To remedy this situation, the Center and collaborating educational agencies designed one-week institutes for experienced multiunit school personnel: principals, unit leaders, and staff reading teachers. One-week institutes for staff teachers of math, science

and other curriculum areas were to be added as the program developed. The objective of these institutes was to meet the immediate needs of the staff members involved in the multiunit school. For example, the one-week institute for unit leaders would include sessions on setting up behavioral objectives, using group dynamics techniques, assessing and using the strengths and talents of a differentiated staff, designing and carrying out instructional programming in subject areas, generating aesthetic and motivational techniques, and designing and carrying out staff development activities pertinent to the needs of the unit. In the same way, the focus of the institutes for principals and reading staff teachers would be on enhancing the capabilities of the particular target group (Klausmeier et al., 1971b, p. 86).

Seven teacher education institutions (University of Wisconsin campuses at Madison, Milwaukee, Eau Claire, and La Crosse; the University of Toledo [OH]; Marquette University [WI]; and, in the second year, the University of Hartford [CT]) subcontracted with the R&D Center to offer one-week refinement institutes for 600 MUS-E personnel during 1971-72. These institutes provided experienced unit leaders, building principals, and staff reading teachers with an opportunity to refine their concepts and practice (Lins & Klausmeier, 1977, p. 12; Walter et al., 1975, p. 29).

Refinement-institutionalization

This phase was designed as an academic year-long program with a practicum, leading toward a master's degree or a post-master's specialist certificate. In 1971-72, adequate monetary assistance was available to provide ten building principals, twenty-five unit leaders, and five reading staff teachers with this opportunity. Comparable programs for personnel in other curriculum and administrative areas would be added later on. These programs would require admission to the graduate school of the teacher education institutions providing them and the creation of a number of precisely targeted new graduate courses. For example, the program for multiunit principals would include the following courses for the first semester: "Organization and Operation of the American Educational Enterprise; The School Principalship; Supervision of Instruction; and Educational Innovations" (Klausmeier et al., 1971b, p. 86). During the second semester, students would study: "Administrative Behavior; Innovations in Education; the Legal

Aspects of the Principalship; School Finance; and other related topics” (Klausmeier et al., 1971b, p. 86). A clinical experience customized to the needs of each participant would also be a key part of the program. A simultaneous practicum would take place in a multiunit school. In the same way, programs for unit leaders and reading staff teachers would combine course work, specifically customized clinical experiences, and a practicum in a multiunit school (Klausmeier et al., 1971b, pp. 86-87).

The Center would subcontract with teacher education institutions to develop and carry out these programs. The plan suggested at least one teacher education institution in each state to provide a program for each of the above lists of personnel, as well as for each classification of staff teachers in a variety of curriculum areas (Klausmeier et al., 1971b, p. 87). During 1971-72, three teacher education institutions – University of Wisconsin-Madison, University of Wisconsin-Eau Claire, and Marquette University in Wisconsin – conducted academic-year programs to prepare persons to be Wisconsin Design for Reading Skill Development coordinators (N=5), unit leaders (N=24), and IGE principals (N=9) (Lins & Klausmeier, 1977, p. 12; Walter et al., 1975, pp. 29, 31).

“To what extent and how were school districts mobilized in installing MUSE/IPM after these nationwide dissemination efforts?” is the question I turn to in the next section.

Mobilization for the Installation of MUSE/IPM at the District Level, 1971-72

The installation criteria of the Wisconsin R&D Center called for participation by district personnel in commitment, planning, decision-making, training, and supportive assistance to the new MUSE/IGE schools (Ironside, 1972, p. 84). As agreements were made between the Center and the State Department of Education, a similar agreement was reached between the state and the school district, naming mutual responsibilities and particularly calling on the district to designate a liaison, provide funds for inservice and other training, and otherwise monitor the implementation of MUSE and IPM in the local school(s) (Ironside, 1972, pp. 219-220). The formal agreement reached between the state and the school district also included such individual school tasks as: assessment of teacher attitude, opportunity to transfer; Preschool Workshop, 2-day inservice training; and “implementation of a minimal standard” in organizing elements of the MUSE

structure and IGE instructional programming, as well as a planned program of parent communication (Ironside, 1972, pp. 219-220).

As part of a process evaluation of the nationwide installation of MUSE/IPM, Ironside (1972; 1973) from Educational Testing Service, under contract with the Office of Program Planning and Evaluation, U.S. Office of Education, gathered data on the status of MUSE/IPM implementation as well as the adoption of MUSE/IPM at the district and school building levels. The data were gathered through three separate procedures: a school survey questionnaire, a set of detailed questionnaires, and site visits. First, a school survey questionnaire was administered to principals of all 287 schools listed on rosters supplied by nine state coordinators and two city coordinators and a district questionnaire to 112 school districts. Since schools installed at various times, survey administrations were conducted on February 1, April 1, and May 1, in order to reflect practices approximately 3-5 months after installation of MUSE/IPM. Second, a set of detailed questionnaires was administered at the end of April to a 20% sample of the original roster of 287 schools. Different instruments, including IIC questionnaire, were prepared for several individuals and groups within the school, with emphasis upon (a) detailed information concerning the nature and functioning of the MUSE organization and (b) the procedures used in IGE instructional programming. Third, site visits were arranged in each of eight states at three schools which had been randomly selected. In all, 25 schools were observed for a total of 50 visits. Ten schools were visited three times – in fall, winter, and spring; the preschool workshops of five of these were also attended (at the beginning of the year), allowing enough contact and data to develop implementation case studies (Ironside, 1972, p. 11).

The description in the following section is largely based on the results of Ironside's (1972) study of 112 school districts in ten states⁴ and his follow-up study (1973). A district questionnaire was sent to these school districts on February 1, April 1, and May 1, 1972 since these school districts installed at various times. It is of note that responses to these questionnaire items were obtained about half a year into the implementation timetable (Ironside, 1972, pp. 85, 88). The following section starts with a

description of district awareness of IGE, followed by descriptions of district governing groups, League of schools, supportive district policies, and participation of district personnel in training programs.

Awareness

Two-fifths of the districts indicated that they had first learned of the innovation at “overview” and introductory meetings; other districts encountered the innovation through professional journals and other regular publications (Ironsides, 1972, p. 90).

Regarding the major considerations that made it feasible and/or desirable to install the multiunit/IGE patterns in district school(s) in 1971-72, 42 districts (38%) expressed concern for individualization, which Ironsides summarized as: “to provide direction and framework for the individualized education we wish to accomplish.” Additional considerations are described below, in descending order of mention:

1. Staff readiness (& willingness) for these patterns
2. We have already been engaged in related patterns; now we are provided a systematic way of continuing
3. The school board wishes to move this way, and has lent some encouragement
4. We have a building which is suited to these patterns
5. Financial support (state) for moving this way is available. (Ironsides, 1972, p. 91)

As to what groups were advised of MUSE/IPM possibilities after initial awareness but before district commitment, the school Board and district administration were most commonly informed (74 districts or 66% and 64 districts or 57%, respectively) (Ironsides, 1972, p. 91). Regarding a set of informational efforts directed toward parents and the community after district commitment, 93 districts (83%) indicated at least one meeting or publication aimed at informing the school community. These included “parent meetings, coffees, Board meetings”; publications were defined as “newspaper articles, letters from the district office, Board notices, and MUSE/IGE publications distributed” (Ironsides, 1972, pp. 91-92).

⁴ Colorado, Connecticut, Illinois, Minnesota, Ohio, South Carolina, Wisconsin, Indiana, New Jersey, Lincoln, Nebraska, San Mateo, California. Lincoln, Nebraska and the San Mateo area of California were treated as “one state” in Ironsides’s (1972) study.

Decision Making

In order to determine the major decision makers in the adoption of MUSE/IPM, Lacy (1972) conducted a study with a sample of superintendents, assistant superintendents, principals, teachers, and central office staff members from the seven school systems and ten schools located in Indiana and found that the major impetus for change came from administrators, not teachers. The administrative staff in six of the seven participating school systems took the initiative to bring the idea of MUSE/IPM to the district (Lacy, 1972), though the superintendent of schools was not the initiator in any case (Lacy, 1972, p. 35). As shown in Table 4.1, titles of the persons in seven districts who was initially responsible for bringing the idea of IGE to each school system were: Assistant Superintendent for two districts; Director for Elementary Education for two systems; Elementary Curriculum Coordinator for two districts; and Elementary Teacher for one system (Lacy, 1972, p. 35).

Table 4.1

Position Title of the Person Who Was Initially Responsible for Bringing the Idea of IGE to the School System

School System	Position Title in the School Corporation
A	Assistant Superintendent for Curriculum
B	Elementary Teacher
C	Director for Elementary Curriculum
D	Assistant Superintendent for Instruction
E	Director for Elementary Education
F	Elementary Curriculum Coordinator
G	Elementary Curriculum Coordinator

Source: from Methods of introducing Individually Guided Education (IGE) programs in selected school systems in Indiana, by D. G. Lacy, 1972, Unpublished doctoral dissertation, Indiana University.

According to another study (Goodridge, 1975) conducted in 1974 with a sample of eight IGE schools in four states – California, Massachusetts, Texas, and Wisconsin – each of which represents two IGE schools, principals were the major decision makers concerning the adoption of IGE (pp. 80-81). In the majority of cases, this decision was shared with the staff teachers (See also Lacy, 1972). The superintendent was not involved in the adoption decision process in any of the schools where the major decision makers were the principal and the staff. In the one case where the superintendent and the board shared the making of the adoption decision, the principal and the staff teachers were

excluded from participating in this decision. In this study, parents and the central office personnel were minimally involved in the adoption decision process and school boards were not seen as instrumental in the adoption of IGE, although presumably they sanctioned the decisions of other school officials (see also Barrows et al., 1979). In short, the IGE adoption decision in these eight schools was not shared between board members, central office personnel, superintendent, principal, staff and parents (Goodridge, 1975).

Regarding influential factors in the adoption decision process, Goodridge (1975) summarized his findings as follows:

(1) Decision makers and non-decision makers agreed that individualization of instruction related to the IGE program was the major reason for the adoption of IGE, (2) The adoption of IGE for the sake of prestige and keeping up with current trends or for a gain in funding were seen by many respondents as being important reasons for the adoption of IGE, (3) A number of respondents conceived IGE as consisting mainly of the Wisconsin Design for Reading Skill Development and considered that IGE was adopted to utilize this reading program, (4) The responses of teachers in particular as to why IGE was adopted showed a lack of awareness of many of the seven components of the total IGE program, and (5) School boards were often prepared to let others decide about educational programs if no extra cost was involved. Where increased expenditure was required then the board wished to be involved in these decisions. (pp. 149-150)

Those who made the adoption decision believed that they had sufficient information to do so. Roughly one year after adoption, however, most decision makers in the Goodridge study, especially teachers, realized that the amount of information available to them at that time had been insufficient. Some decision makers, particularly teachers, agreed to the adoption of IGE but made no commitment to adapt their own instructional methods or behaviors to the requirements of the new program as reflected in the seven components of IGE (Goodridge, 1975)

In contrast to Goodridge's (1975) findings but similar to Lacy's (1972) on major decision makers, another study (Barrows, Klenke, & Heffernan, 1979), using a sample of ten Wisconsin and three non-Wisconsin schools, maintained that the introduction of the IPM component of IGE into a school was generally the result of a decision made at the administrative level without teacher input. In eleven of 13 cases, central office personnel were key in the adoption process. In only two schools, were teachers involved (Barrows et al., 1979, p. 172).

According to Barrows and others (1979), the decision to adopt was nearly always made either by an individual or by no more than two individuals or groups. Seldom was the adoption decision shared between more than two levels, and parents and school boards were scarcely involved (p. 206). The adoption of IGE in three schools was decided solely at the central office level. In eight of the eleven cases where the central office played a major role, the decision to adopt was shared: the central office and the school principal agreed to adopt the innovation in five schools; the decision was shared between the school resource teacher and her central office supervisor at another; central office impact to adopt IGE was indirect at the remaining schools, where building committees were appointed to examine alternatives and make the decision. At these two schools, parent representatives actively participated in the decision to adopt IGE through their membership on the school's Building Committees (p. 195). However, in all but these two cases, parents were very minimally involved (Barrows et al., 1979, p. 174).

In only one of the ten sites in Wisconsin did the superintendent make the decision to adopt IGE without consultation with the principals or teachers (Barrows et al, 1979, p. 195), while in two cases, the superintendents played no role at all in the decision to adopt IGE. In only half of the ten cases did the principal even participate in the decision and in only two of these five did teachers participate. In the other three situations, the principals shared the decision with central office people. In the remaining five cases, the principals did not participate in the decision at all (Barrows et al., 1979, p. 193).

Some resistance to the adoption of the innovation was noted. This is largely related to the fact that in general, teachers were not offered the opportunity to transfer to another school if they did not desire involvement in IGE. In fact, in many cases transfers were not available (Goodridge, 1975). This situation seemed to have contributed to the continuation of certain non-IGE practices such as ability grouping and departmentalization in the IGE schools (Barrows et al., 1979, p. 206).

With respect to the influential factors surrounding adoption, about half the decision makers and almost none of the non-decision makers cited individualized instruction as a reason. Flexible grouping, the reading program WDRSD, and the organizational structure of IGE were frequently cited advantages. Conversely, prestige and funding played virtually no role in adoption (Barrows et al., 1979, pp. 206-207).

IGE practitioners were generally not the key agents for adoption in 13 sites. Rather, individuals already employed by the school districts, who were relative novices to IGE, became agents for change. Through contacts with the innovation in university courses or at IGE awareness workshops, district people became aware of the innovation and brought it back to their school systems (Barrows et al., 1979, p. 207).

In short, in the majority of school districts, central office personnel were major decision makers in the adoption process. The decision to adopt IGE was sometimes shared with the principal, but rarely with parents and teachers. This lack of teachers' participation in decision making on MUSE/IPM adoption led to lack of commitment to the program, resulting in its early drop or discontinuance after a period of implementation.

District Governing Groups

Ironside (1972) found that three-fourths of the 112 districts designated a liaison or coordinator to assist MUSE/IPM implementation. Among the 86 districts with a designated liaison, the most prevalent responsibility was the coordination of multiunit plans and their implementation. Only 38 districts (34%) had a "system-wide policy committee" or district governing body of some other name in 1971-72. Apparently, this was the case because many districts had only one school participating in 1971-72. Indeed, eleven respondents clearly indicated that the school's IIC was considered to be serving the district committee function (Ironside, 1972, pp. 88-89).

The size of those 38 District Policy Committees varied from three to eleven or more members (with the latter being the most common), and met anywhere between once a week and twice a year. About three-fourths of these districts indicated holding at least monthly meetings, suggesting that their sessions were devoted to the continuous solution of installation problems or the making of key decisions. The majority of these policy committees included the superintendent (or assistant or associate). All but one committee had school principals, and the majority included unit leaders as well; one third of these 38 districts followed the project's recommendation of assigning principals, unit leaders, and staff teachers along with district personnel (Ironside, 1972, p. 89).

Walter et al. (1975) noted that the above situation had not much changed some years later. In many states, System-wide Program Committees (SPCs) were not assuming the roles and responsibilities outlined in project implementation guidelines. Some districts or counties never formerly organized SPCs, while others indicated that since they had only one IGE school, or their district was small and had only one elementary school, they did not see the need for a SPC in their particular cases (Walter et al., 1975, pp. 42-43).

Krula (1974) conducted a study with a sample of thirty-two school systems in nine states (Connecticut, Illinois, Indiana, Minnesota, New Jersey, New York, Ohio, South Carolina, and Wisconsin), represented by 264 participants (42 central office representatives, 82 building principals, and 140 unit leaders). The SPCs in these nine states had generally been organized based upon official guidelines (See Chapter 1 on the guidelines). The mean membership level of the SPC sample was 12.43, with minimum membership being four and maximum 28. Central office personnel were represented on all SPCs studied, but 17 of the 32 districts' chief administrators did not actively participate, and in ten districts neither the superintendent nor the assistant superintendent were SPC members. The mean representation on SPCs for each of these leading administrators was .47. Collectively, central office representation — superintendents, central office personnel — ranged from a low of one person to a high of six persons on the SPCs studied. In contrast, building principals were represented on all SPCs surveyed. Their mean representation was 3.62, with the least number on any SPC being one and the greatest number being eight. Unit leaders were typically represented on the SPC at the 5.37 level; however, in four cases this group was totally absent. The second teacher category (other teacher specialists) was present on SPCs at the 1.53 level. Combining both teacher categories produced a mean representation level of 6.87 for the typical SPC (Krula, 1974, pp. 134-135).

Krula's (1974) respondents indicated that the SPC had effectively achieved eleven of the twenty-four performance objectives identified by the study. Table 4.2 describes SPC mean effectiveness ratings in descending order of strength, as rated by the total membership. The effectiveness rating is based on descriptive criteria (4.51-5.00=very effective, 4.01-4.50=quite effective, 3.51-4.00=effective, 3.02-3.50=limited or

Table 4.2

SPC Effectiveness Ratings Reported by Total Sample (N=264) (by rank order of achievement)

Cat. Item	Task Description	Mean
4 th Quartile		
B	Agenda is prepared for each SPC meeting.	4.33
B	Minutes are kept for each SPC meeting.	4.30
B	Meets regularly as scheduled by superintendent or designee.	4.28
B	Agenda is distributed before each SPC meeting.	4.09
B	Meeting minutes are distributed to all SPC members.	3.98
A	Endorses nongrading & continuous progress.	3.72
3 rd Quartile		
B	Coordinates communication among IGE schools.	3.70
A	Supports adoption & installation of IGE curriculum.	3.65
A	Endorses adoption & installation of IGE curriculum.	3.63
A	Provides support for nongrading & continuous progress.	3.63
B	Coordinates communication among IGE schools and others.	3.51
C	SPC members are responsible for own IGE evaluation.	3.49
2 nd Quartile		
C	Plans for 3 pre-implementation, staff inservice sessions.	3.46
D	Develops plans for interpreting progress/problems to community.	3.45
D	Implements plans for interpreting progress/problems to community.	3.45
A	Helps building staff identify instructional materials.	3.39
B	Develops guidelines for flexibility in sys. policies/procedures.	3.33
A	Plans IGE preassessment program with building staff.	3.24
1 st Quartile		
B	Develops guidelines for adequate material, equipment & space.	3.22
A	Helps building staff identify behavioral objectives.	3.22
C	Plans inservice education for new staff after 1st year of IGE.	3.14
C	Provides via Board for 3 day, preschool staff development.	3.12
A	Coordinates IGE preassessment with testing program.	3.04
B	Develops guidelines for staff recruitment & allocation.	3.04

Source: from The Functioning and Effectiveness of the Systemwide Policy Committee as Found in School Systems Implementing Individually Guided Education, by L. W. Krula, 1974, Doctoral diss., Northern Illinois University, DeKalb, IL.

*Performance categories: A-Instructional Programming; B-Organizational Operations; C-Staff Development; and D-Home-School-Community Relations.

questionable effectiveness).

Analysis of these ratings indicates that the typical SPC accomplished slightly less than half of its performance objectives in an effective manner (Krula, 1974, pp. 136-137). Operational tasks predominated and received the highest scores. Respondents acknowledged that the SPC had been quite effective in preparing agendas and minutes, distributing agendas, and holding regular meetings, while rating their distribution of

minutes and endorsement of non-grading and continuous progress as “effective” (Krula, 1974, pp. 96-98).

Ratings in Quartile 3 indicates that the SPC had effectively performed several instructional tasks, notably, endorsing and supporting the adoption and installation of the IGE curriculum, and supporting non-grading and continuous progress. Credit was also given for effective accomplishment of coordination of communication among IGE schools, as well as between these schools and non-IGE schools (Krula, 1974, p. 98). Mean ratings of all tasks in or below Quartile 2, and the last in Quartile 3, show that most respondents believed their SPCs had only somewhat accomplished these objectives. The SPC was of limited or doubtful effectiveness in its performance of the following tasks: planning for pre-implementation, staff inservice sessions, developing and implementing plans for interpreting progress and problems to the community, helping building staff identify instructional materials, developing guidelines for flexible system-wide policies and procedures, and planning the IGE preassessment program with building staffs (Krula, 1974, pp. 98-99).

The performance objectives ranking in the lower quartiles tended to be those associated with personnel and instructional matters at the building and/or classroom levels (Krula, 1974, p. 137). Performance tasks included in the 1st quartile started with a high of 3.22 and decreased to 3.04. Receiving the lowest quartile rankings were “developing guidelines for adequate material, equipment and space,” “helping building staff identify objectives,” “planning inservice education for new staff after first year in IGE,” “providing via the Board preschool staff development sessions,” “coordinating IGE preassessment and testing programs,” and “developing guidelines for staff recruitment and allocation of IGE schools (Krula, 1974, p. 99).

League of Schools or Linkage⁵

⁵ A number of Leagues of schools were created during the 1970s either under the guidance of /I/D/E/A/ or with the help of teacher education institutions. Since many IGE schools were affiliated with both the R&D Center and /I/D/E/A/, however, it is important to consider the existence and functions of Leagues of schools in relation to supporting environments at the district level. The concept of a league of cooperating schools was developed by John Goodlad, who had served as Director of the /I/D/E/A/ Research Division in Los Angeles during the 1960s. However, this concept was ultimately unacceptable to the Center because of the Center’s adherence to the legal relationships between schools and school districts (Rebeck, 1977, p. 95).

A sizable number of district respondents (N=87 or 78%) reported that a League of schools (or other such linkages) existed in their states or areas and that their schools were members (Ironside, 1972). The great majority who reported League membership also reported the League's general value. A total of 76 (or 87%) of 87 respondents replied that the League was serving a useful purpose (Ironside, 1972, p. 89).

In a follow-up study (Ironside, 1973) on the question of active membership in a linkage group, an average of 71% of schools considered themselves to be in this category. Schools which responded NO to this item were found in seven different states; all eight states involved had formal linkage groups, suggesting that some schools were either inactive by choice or did not know this resource was available. The majority of IIC's noting their active membership also reported that the linkage group was generally of value to the school; those responding NO to the question of benefit were located in six different states (Ironside, 1973, p. 19)

Policies and Activities Supportive of MUSE/IPM Implementation

Some 26 (23%) of districts indicated that they had a district policy regarding their involvement in MUSE/IPM schools in relation to student teachers, while 71 (63%) others reported that the district had or foresaw a particular alliance with teacher-training institutions relating to MUSE/IPM. One may infer from these findings that most districts usually had, or planned to have arrangements with teacher education institutions, but did not have specific policies in this regard that distinguished their MUSE/IPM schools from conventional schools (Ironside, 1972, pp. 99-100).

In addition, some 57 (51%) districts reported having inservice activities "specifically related to MUSE/IPM installation under the sponsorship or direction of the district" during the 1971-72 school year. Another 21% (N=24) indicated no such inservice training to date but some was arranged for later in the year. Further, 50% of the districts (N=56) "have defined policy concerning inservice activities"; this generally meant released-time for training or financial support for time and materials (Ironside, 1972, pp. 100-101).

Some 37% (N=21) of these 57 districts indicated sponsorship of a one-day inservice session and another 25% (N=14) sponsored half-day programs, while 25%

(N=14) reported district sponsorship of a credit course. The most common type of assistance (33 districts or 58% of those with activities) was the availability of district personnel for support as a resource person at unit or IIC meetings. Taking into consideration the general nature – and wide applicability – of such consultative service, this might be deemed a small percentage of districts with personnel so engaged (Ironside, 1972, p. 101). Concerning the nature of assistance, 54 (48%) districts either left the item blank or wrote in the word “none.” The most common two categories were “leading or sponsoring training” and “consultation and support in solving implementation problems” that were checked by 20% (N=22) each (Ironside, 1972, p. 101).

Participation of District Personnel in Training Activities

The opportunities for participation in training sessions began with spring 1971 national overview/awareness conferences, through local school training sessions, to visits to functioning MUSE/IPM schools, and on to miscellaneous training and exposure activity (Ironside, 1972, p. 93).

A total of 48 district personnel indicated participation in these introductory one-day national overview conferences on MUSE/IPM, representing fewer than 32 districts (29%) of the 112 (Ironside, 1972, p. 93; p. 51, Table D-25 in Appendix D-6). State-level conferences (for those superintendents, principals, and state agency personnel making formal commitment to the project) were attended by a total of 100 persons, representing 75 (67%) districts of the 112 (Ironside, 1972, p. 94; p. 51, D-26 in Appendix D-6). Pre-installation workshops at the school level (for overview, commitment, and preliminary planning purposes) were attended by three categories of persons in their own district: superintendent (or associate) (N=23 or 21%), supervisor (or Director of Instruction) (N=28 or 25%), and other members of the administrative staff (N=16 or 14%), representing 44 (39%) districts of the 112 (Ironside, 1972, p. 94; p. 51, Table D-27 in Appendix D-6). Three-day staff development workshops for principals and unit leaders (sponsored mostly at the state level) were attended by a surprising number of district persons: 22 superintendents, 21 supervisors, ten reading specialists, and four others, representing 43 (38%) districts of the 112 (Ironside, 1972, p. 94; p. 51, Table D-28 in Appendix D-6). Preschool workshops (usually 3-5 day sessions held in the local school

for final preparation to begin the implementation with children) were attended by 26 superintendents, 29 supervisors, 15 reading specialists, and seven others, representing 44 (39%) districts of the 112 (Ironside, 1972, p. 94; p. 51, Table D-29 in Appendix D-6).

Stated differently, the number of districts with representatives at either national overview conferences or state conferences was 85 (76% of the 112 districts). Thus a large majority reported, in effect, having made the effort to go to distant meetings in order to learn about MUSE/IPM or to assist in the commitment process. On the other hand, attendance at all three types of meetings (national overview or state conference, local commitment, and school leader training or local staff training) was reported by 32 districts – the six which attended all five activities plus 26 others with attendance at the three types. Again, looking at participation in either of the two staff training workshops (school leader training or local staff training), a total of 49 (44%) districts were represented. Table 4.3 summarizes total attendance, by district, for each of the five meetings separately. Clearly, district personnel participated more in the away-from-home activities, suggesting their closer ties with state education agencies than local schools in relation to this innovative project (Ironside, 1972, pp. 95-96).

Table 4.3
Number of Districts Attending Each of the Five Activities

Meetings	Number	Percentage
None	17	15
All	6	5
1. National overview	32	29
2. State commitment	75	67
3. Local commitment	44	39
4. School Leader Training	43	38
5. Local staff training	44	39

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE School Model for Elementary Schools: A Process Evaluation (p. 96), by R. A. Ironside, 1972, Princeton, NJ: Educational Testing Service.

A second set of training and exposure activities – four specific workshops and institutes – were sponsored by the R&D Center and held in Madison, Wisconsin (Ironside, 1972, p. 97). The June 1971 leadership conference (national Seminar) for state department personnel was attended by two superintendents and three other district persons. The coordinator network workshop held in October 1971 was attended by two

district representatives (Ironside, 1972, p. 97). The June reading workshop and the July reading institute were attended by: (1) 14 district specialists and four other district personnel and (2) six reading specialists, respectively. Both of these sessions were attended by a fairly large number of educators, but many of them were reading teachers in schools and did not attend as district representatives (Ironside, 1972, p. 97).

The final set of training opportunities included six sorts of activities which schools, districts, or Leagues might have arranged (Ironside, 1972, p. 97). At least 30 districts were represented on visits to operating MUSE/IPM schools, about half of these visits occurring in the spring of 1971 (as preparation for installation of MUSE/IPM), and the other half occurring in fall 1971 (in many cases as a search for implementation assistance) (Ironside, 1972, p. 98). Specifically arranged staff development sessions for the entire staff of the school(s) were attended by reading specialists as well as district administrative personnel (Ironside, 1972, p. 98). League-sponsored general training or meetings as well as special statewide or regional reading conferences were attended by (1) some 16 superintendents and 30 other district personnel and (2) 19 reading specialists and seven other persons, respectively (Ironside, 1972, p. 98). Special conferences at the district level (for general purposes) were attended by (1) some nine (8%) superintendents (or associate or assistant), 13 (12%) supervisors (or Directors of Instruction), and six (5%) other members of the administrative staff. Other miscellaneous activities were attended by two district personnel (Ironside, 1972, p. 98).

In summary, there were, overall, three sets of meetings and workshops listed in the district questionnaire: (1) the standard set of five national, state, and local meetings which were considered the "training chain"; (2) four stated training sessions conducted by the R&D Center; and (3) miscellaneous workshops and meetings held at the option of the school, district, or linkage group (Ironside, 1972, p. 99). Among these three categories, district participation was highest at the standard set of five meetings. For four of these, attendance accounted for between 29% and 39% of the 112 district; 67% of the district were represented at the fifth, the state-level meeting for commitment of districts to the new patterns. Second in terms of attendance was the miscellaneous set of activities, where visits to operating schools and attendance at League functions were the most popular. This attendance, however, represented participation by fewer than 35% of the

districts in all. As for the sessions at the R&D Center, very few districts reported participation, with the June reading workshop ranking highest in attendance. By any measure, district attendance and participation was at a low level compared with the opportunities available (Ironside, 1972, p. 99).

Mobilization for MUSE/IPM at the School Building Level, 1971-72

According to Parker (1977), the R&D Center reported that approximately 450 schools (including middle and high schools) adopted MUSE/IPM by 1971-72 school year. (Note: It was also reported that an additional 350 schools affiliated with /I/D/E/A/ adopted MUSE/IPM by 1971-72, although a number of these schools were repeated in the Center's figure.) It is of note that a number of these schools were later found not to deserve the label "IGE school" (Ironside & Conaway, 1979).

As part of the study mentioned previously in this chapter, Roderick A. Ironside (1972) investigated the structured nationwide installation of the multiunit organization and the Instructional Programming Model in 287 elementary schools in ten states. This large-scale study was followed by a small-scale follow-up study in 1972-73 (Ironside, 1973). The following depiction of backgrounds and characteristics, history of innovative practices, and commitment to MUSE/IPM is based on a total of 205 completed responses⁶ by school principals (Ironside, 1972, pp. 9-10).

Backgrounds and Characteristics of Schools that Adopted IGE, 1971-73.

Of 205 schools, over half the total were located in suburban areas and small cities (up to 50,000). The next largest group belonged to large cities (with 16%), excluding center-city areas. Site-visit information and other contacts indicated that center-city urban locations accounted for a very small number of schools, perhaps no more than ten. One-fifth of the schools belonged to the two rural categories: rural area and rural near city. The remainder belonged to the category of medium-sized cities. In all, the breakdown in approximate proportions was as follows: Cities 25%; Towns 25%; Suburbs 25%; and

⁶ Colorado (N=28), Connecticut (N=21), Illinois (N=28), Minnesota (N=18), Ohio (N=13), South Carolina (N=17), Wisconsin (N=46), Indiana (N=13), New Jersey (N=11), Lincoln, Nebraska and San Mateo, California (N=10).

Rural Areas 25% (Ironsides, 1972, p. 43).

On prevailing socio-economic levels, two-thirds reported middle-class, with 7% indicating upper-class and 23% indicating lower. Upper class schools were represented in five of the ten states, while the other two categories were located in all ten states (Ironsides, 1972, p. 43).

Regarding the nature of the building, over half had separate classrooms opening onto hallways – with “classrooms and open space,” “open space only,” and “some movable walls,” from high frequency to low. Just 3% of the respondents indicated an “other” category (Ironsides, 1972, p. 43). Numerous schools had, by the time of study, removed walls or built doorways to solve looming problems of needed space. In contrast, some teachers in open-space schools had found it beneficial to close off their spaces (Ironsides, 1972, p. 44). Some 47% of first-semester schools had the traditional building, while 81% of second-semester schools had divided classrooms “down the hallway” (Ironsides, 1972, p. 44).

Concerning first awareness of MUSE/IGE concepts, the greatest percentage (37%) had attended an overview/introductory meeting. Another 36 (18%) had been asked by the District to take into account the new concepts, and about 10% had learned about the patterns through professional journals, information provided by the district, or other modes (Ironsides, 1972, pp. 44-45). This breakdown indicates that at least 66% of the first acquaintance came by chance: journals; information provided by the R&D Center, the state or district; overview meetings; and professional meetings. The remainder evidently occurred through more direct encounter: a detailed request by the district and familiarity with an existing MUSE/IPM school. Some schools – in all states but one – were approached by the central office, and in eight states the district evidently handed out basic information (Ironsides, 1972, p. 45).

History of Innovative Practices

When principals were asked about school facilities and past programs, wholly one-quarter of them indicated having characteristically traditional schools in the years before the 1971-72 school year. This was determined based on the following three elements as criteria (out of twelve provided as a checklist): (1) departmentalization; (2)

library; and (3) self-contained instructional classrooms. Hence it can be inferred that these 50 schools (24%) had made a fairly radical move in adopting MUSE/IPM patterns. Several “visit schools” were included in this number, and indeed, observations and interviews verified the above inference at least as far as those schools visited were concerned (Ironsides, 1972, p. 46).

The 155 (76%) remaining schools indicated having practiced one or more of the nine “innovative” elements in the years prior to 1971-72. These included:

1. Multiage grouping for instruction (34%)
2. Learning resources center or media center (35%)
3. Individualized curriculum (34%)
4. Team teaching (45%)
5. Continuous progress of students (29%)
6. Differentiated staffing responsibilities (28%)

The other three elements were practiced in less than 20% of the schools.

7. Ungraded primary (19%)
8. Use of the Wisconsin Design for Reading Skill Development (11%)
9. Open-classroom concept (17%). (Ironsides, 1972, p. 47)

A number of schools reported one or two such practices, and others indicated several. In short, it seems likely that, although some 50 traditional schools proceeded with MUSE/IPM, previous experience with innovative practices had a strong influence on the decision made by the other three-fourths of the schools. Many principals reported this in marginal notes, and others did so in interviews. Further, a total of 60 schools (29%) indicated having four or more of the innovative characteristics. These were scattered all over the ten states, with highest percentages in Ohio, Nebraska-California, and Colorado. As a sidenote to the evident receptivity to MUSE/IPM, the majority of schools suggesting innovative practices in 1970-71 also reported them for the previous year and even earlier, in the cases of ungraded primary, continuous progress, team teaching, learning centers, and individualized curriculum (Ironsides, 1972, p. 47).

It turned out at the end of the 1971-72 study that predisposing innovative factors such as previous team-teaching or multi-age grouping were not imperative for MUSE/IPM progress, although these might have been beneficial. Many schools were observed to successfully move from stringently traditional patterns to satisfactory MUSE/IPM implementation. Similarly, predisposing factors did not correlate with

progress or status. Some schools with prior teaming and open areas, for example, did not necessarily move smoothly on the road to success in MUSE/IPM implementation (Ironsides, 1972, p. 223).

Extent of Training and Exposure to MUSE/IPM by School Personnel

There were, as a whole, three clusters of meetings and workshops listed in Ironsides's school questionnaire: (1) the standard set of five national, state, and local meetings (the "training chain"); (2) the several stated training sessions held under the auspices of the R&D Center for particular groups of school people; and (3) various activities neither planned nor indispensably anticipated by the R&D Center or state implementation agencies. The latter were sessions held at the discretion of the school, district, or linkage group, and they probably were organized in response to observed needs or requests. The following is based on principals' reports on attendance at each of 19 different sorts of training events encompassed within these three clusters (Ironsides, 1972, p. 54).

Training Chain. The introductory one-day national overview conferences on MUSE/IPM drew 34 principals and 13 other school persons from six of ten states (Ironsides, 1972, p. 55; Table P-33 in Appendix B-16). The state conferences (for superintendents, principals, and state agency personnel) for state and district formal commitment, which were sometimes held on a regional basis within states, were attended by over half the principals (N=119 or 58%) from all ten states. Also, 31 schools were represented by unit leaders and 25 schools by other persons from seven states (Ironsides, 1972, p. 56; Table P-34 in Appendix B-16).

Pre-installation workshops at the school level, for overview, commitment, and preliminary planning attracted a total of 94 (46%) principals, unit leaders from 80 (39%) schools, staff teachers from 52 (25%) schools, and fewer individuals in four other categories (Ironsides, 1972, p. 56; Table P-35 in Appendix B-16). Three-day staff development workshops for principals and unit leaders (sponsored mostly at the state level) drew 151 (74%) principals and 135 (66%) principals indicated that unit leaders had attended. While every state organized and made available such staff development training, two states had over 90% of principals participating, and four states had

participation in the 50% to 70% range. Participation by unit leaders followed the same pattern across states. Other participants in those workshop included staff teachers from 25 schools, counselors from six schools, librarian from seven, and reading or math teachers from 20 (Ironsides, 1972, p. 57). In another section of the questionnaire, some 160 (78%) principals reported participation in the staff development workshops. The period ranged from one day to six days, with an undetermined length for 79 cases. By far the most common length was three days. The most common purpose was to provide introduction and conceptual framework for MUSE/IPM patterns (95 principals checked this category) – and the large majority considered that the purpose was fulfilled (Ironsides, 1972, p. 70; Table P-36 in Appendix B-17).

Preschool workshops (usually 3-5 days) in the local school for final preparation to begin the implementation with children were held from spring 1971 to January 1972, with over two-thirds in August. In most individual states, the range was over a 4- or 5-month period (Ironsides, 1972, 72). These pre-school workshops were attended by 119 principals (or 58%), along with unit leaders of the school. Two other principals reported that they had not attended but unit leaders had, and in all, staff teachers from 114 schools (56%) were shown to have attended. Table 4.4 puts the Preschool Workshop picture in perspective – across all 205 schools and among the 121 which indicated participation in it (Ironsides, 1972, p.58; Table P-37 in Appendix B-17).

In responding to a different section of Ironsides's questionnaire, 142 principals

Table 4.4

The Extent of Participation in Preschool Workshop by School (N=205)

Total Potential Number of Schools	205
Number of schools with principal attending	119
Number of schools with unit leaders attending	121
Number of schools with staff teachers attending	114
Schools with librarian/IMC director attending	50
Schools with aides attending.....	49
Schools with special-subject teachers attending.....	48
Schools with special education teachers attending.....	39
Schools with reading/math teachers attending.....	39
Schools with interns, student-teachers attending.....	27
Schools with counselors attending.....	5

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE School Model for Elementary Schools: A Process Evaluation (p. 58), by R. A. Ironsides, 1972, Princeton, NJ: Educational Testing Service.

(69%) reported that they had a pre-school workshop as compared to the earlier response of 121 (59%) principals. In place of the formal preschool workshops, a number of schools had organized inservice activities during spring, summer, or fall when school was officially in session, and two principals indicated plans to have such a workshop in the summer of 1972. More than half of the 142 schools held an inservice workshop for the 3-5 days recommended by the R&D Center guideline, another 21 indicated longer workshops – up to ten or more days, and a few held one or one and one-half day sessions. A total of 129 schools (of the 142) indicated a program/agenda prepared for the workshop while six had no prepared program/agenda and seven respondents omitted this item (Ironsides, 1972, p. 73).

The principals took an active training/leadership role in the preschool workshops in 125 of the 142 schools, while the unit leaders took such roles in 110 schools. Such other persons/groups as state and local coordinators, reading consultants and “outside” consultants also contributed in a number of schools, but at pretty less frequencies. The principals of these schools observed that consultants or coordinators had pretty much done the entire job of planning and conducting these workshops (Ironsides, 1972, p. 73).

Table 4.5 shows the number of schools that attended the training chain sessions based on the data provided by the 205 principals – and based on attendance by principals. In three of these instances (state commitment, training for leaders, and training for whole group), the percentage of schools that attended these sessions was above 50% of the total, but never higher than 74%. The principals received the greatest portion of the whole “exposure” in these schools; the next greatest share went to unit leaders, but staff teachers were exposed to any meaningful degree only in step #5 (Ironsides, 1972, p. 63).

Table 4.5
The Extent of Participation in Training Chain by School (N=205)

Training Activity	Number of Schools (%)
1. National Overview	34 (17%)
2. State commitment	118 (58%)
3. Local commitment	94 (46%)
4. Training for leaders	151 (74%)
5. Training for “whole staff”	121 (59%)

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE School Model for Elementary Schools: A Process Evaluation (p. 63), by R. A. Ironsides, 1972, Princeton, NJ: Educational Testing Service.

The training chain was obviously intended as a series of meetings and workshops which would guarantee satisfactory awareness and training for the teachers finally at work in the unit classrooms. But as the previous findings make clear, the training chain was not recognized as an essential set of requirements by the agents of change: the implementation agency, the district administration, and the school staff (Ironside, 1972, pp. 62-63).

Specific Stated Workshops at Particular Locations. A number of workshops were arranged directly or indirectly by the R&D Center, at numerous locations over a 7-month period. These workshops were targeted at three distinct groups: reading teachers and specialists, principals, and unit leaders (Ironside, 1972, pp. 58-59).

The workshop on Reading, June 1971, in Madison, Wisconsin, attracted principals from ten schools, unit leaders from 12 schools, staff teachers from seven, and reading teachers from 12, with the majority from Wisconsin. The Reading Institute, July 1971, in Madison, with an emphasis on the Wisconsin Design for Reading Skill Development, drew principals from four schools, reading teachers from six, and other school personnel from three locations, with the majority of attendees again from Wisconsin. The workshop for experienced reading teachers, August 1971, in Madison, was attended only by reading teachers from three schools. The workshop for experienced unit leaders, August 1971, in Eau Claire, Wisconsin, drew unit leaders from four schools and another school person. The workshop for experienced MUSE/IPM principals, August 1971, in Madison, attracted principals from eleven schools and one other school person. Workshops for experienced unit leaders were conducted four times (five days each) in October and November 1971. These workshops drew unit leaders from 40 schools, with the largest number from Wisconsin, in addition to other attendees from eight schools. Another workshop for experienced principals, November 1971, in Milwaukee, attracted principals from 23 schools, with the great majority again from Wisconsin. A combined workshop for experienced principals and experienced unit leaders, January 1972, in Madison, was attended by principals from 42 (20%) schools and unit leaders from 32 (16%) schools (Ironside, 1972, pp. 59-60; P-38 to P-45 in Appendix B-19).

Information obtained elsewhere made it clear that attendance at these stated workshops was much larger than is described above. The reading workshops, for

example, were directed to personnel from schools using the Wisconsin Design – whether or not involved in MUSE/IPM. And the conferences for “experienced personnel” were attended by many people representing schools which had installed prior to the 1971-72 school year (Ironside, 1972, p. 60).

In summarizing initial training participation by school personnel during 1971-72, Ironside drew several interpretations from the findings:

(1) there was a real and continuing need for these opportunities; (2) in sum, the whole array of training events favored principals and unit leaders; (3) many individuals had what may be considered a minimum of training; (4) schools, rather than persons, were recipients of the training; (5) school staff (and others) found ways of fulfilling their training needs on a local basis. (Ironside, 1972, p. 17)

Personnel at all levels (in the sample of schools polled) observed certain weaknesses in the training offered. A great concern was that the training took place too fast and that a longer planning period – along with more practical training – was needed for effective implementation. These sentiments were not typically group reactions, but were recurrent enough to indicate justifiable concerns (Ironside, 1972, p. 17).

Given the scale of the change program of IGE at the school building level and the lack of training opportunities for and participation by unit teachers, coupled with the locus of decision making on IGE adoption being placed at the district level, it appears that a number of teachers were not sufficiently prepared to commit themselves to IGE.

Commitment to MUSE/IPM

Principals indicated a fairly wide range of dates when their schools were committed to MUSE/IPM for the 1971-72 school year: from sometime in 1970 to the early months of 1972. Second-semester installers in New Jersey and Indiana reported dates ranging from summer into winter of 1972. However, among fall-semester installers, 53 (31%) schools became committed between July and September, 1971, which might be regarded as late dates from the viewpoint of preparation and training time. Four others indicated an even later commitment (Ironside, 1972, p. 45).

As for the means by which commitment took place, the majority (N=115 or 56%) reported that “the school staff had considered the pattern, and volunteered,” and this included schools in all ten states. Another 18% (N=37) indicated that the school had been

“selected by the district for this innovation,” while yet another 10% (N=20) were involved as part of a district’s long-term plan. And 12 (6%) principals responded that the commitment was “the principal’s decision on his own.” Thus, 28% (N=57) of the schools were directly affected by district plans or decisions, and another 6% progressed toward MUSE/IPM by virtue of the principal’s own decision. Thus, based on the reports by principals themselves, teachers and staff members in almost as half the schools did not have a full voice in the commitment (Ironsides, 1972, p. 46).

However, the number of schools committed reportedly through staff participation and volunteering needs was probably “less than half” according to the findings made by site visit teams. While visiting a few schools whose staffs reportedly had had opportunity to study the innovations and had agreed to proceed in 1971-72, researchers found that staff members felt they had been forced into the decision by the principal and were not committed to MUSE/IPM practices (Ironsides, 1972, p. 214).

In summary, the staff members of the majority of schools installing MUSE/IPM, 1971-72, did not participate in a variety of training sessions, nor were they involved in the decision making on the adoption of IGE. We can infer, then, that they were not committed to MUSE/IPM. In contrast, the staff who did participate in a number of training programs and in the decision to adopt IGE were probably committed to MUSE/IPM. Consequently, the majority of participating schools with staff not committed to MUSE/IPM were not well prepared to make a successful changeover to IGE, while the minority of IGE schools with committed staff were well better to proceed with the change program and innovate their traditional organization and teaching practices.

Mobilization Summary: Key Factors in the Adoption Phase of MUSE/IPM

This section answers the following questions: (1) “What factors in the phase of adoption either facilitated or hindered the process of mobilizing people and resources toward the implementation of MUSE/IPM?”; (2) “What were the possible impacts on implementation of federal funding agencies focused on getting innovations adopted?”; and (3) “Why did so many school districts adopt MUSE/IPM in such a short time period?”

In the history of IGE, four factors played a major role in the phase of adoption in relation to the implementation of MUSE/IPM: locus of decision, need for a change, readiness, and resources. According to the data, the first factor, “locus of decision,” had more to do with the district administration that made the decision on the adoption of MUSE/IPM than grass-roots staff. This top-down nature of decision making in the majority of school districts that adopted IGE was related to the fact that the major impetus for IGE adoption came from a federal government agency, i.e., the United States Office of Education (USOE). After the USOE awarded the Wisconsin R&D Center a grant to accomplish four phases of the nationwide installation effort, the Center established subcontractual relationships with state education agencies in nine states in 1971 to start 20-50 MUSE/IPM schools. In turn, state education agencies made a contract with school districts; and the central office administration, either alone or with a principal, then made a decision to transform a traditional school into an IGE school.

Thus, as with many other federally funded programs during the 1970s (Fullan & Pomfret, 1977, pp. 387-388), after the political decision to select IGE for nationwide dissemination was taken, the focus of the grantee was on obtaining as many adoptions as planned for in as short a time as possible. As a result, the decision to adopt IGE was more or less beyond the control of the staff in the majority of IGE schools. The staff of only a small number of schools who perceived a need for an innovation participated in the IGE adoption decision and appeared committed to the initiating process. Due to this politicized mobilization, IGE was apparently adopted for symbolic or opportunistic reasons in a number of schools. Although hard to determine, I estimate that between 62 and 87 (22% to 30%) of 287 IGE schools fell into this category because these schools were known to have adopted IGE, but did not implement MUSE/IPM at all (Ironsides, 1972, p. 14).

As for opportunistic adoption, Berman and McLaughlin (1978) held that where local school officials view the adoption of an innovation primarily as an opportunity to garner extra, short term resources, or as a “low cost” way to cope with bureaucratic or political pressures, the availability of federal funds, rather than the possibility of change in educational practice, motivates project adoption. They continued:

Innovation qua innovation often serves the purely bureaucratic objective of making the district appear up-to-date and progressive in the eyes of the community. Or a change agent project may function to mollify political pressures from groups in the community to “do something” about their special interests. Whatever the particular motivation underlying opportunistic adoption there was an absence of serious educational concerns. (p. 14)

As with other federally funded programs (Berman & McLaughlin, 1978), this type of IGE adoption pattern – top down oriented and driven to produce as many adoptions in as short a time as possible – did not promote successful implementation. As Pincus (1974, pp. 125-127) observed, when federal funding agencies focused on getting innovations adopted, inadequate time and resources were allotted for informing people about what was planned and why, or for supporting implementation efforts. In addition, local school authorities were understandably oriented toward obtaining the money and less involved in the work of successfully implementing the program; thus adoptions of funded innovations might have been entirely sufficient for political purposes. Also, frequent changes in program priorities by federal funding agencies made for a too short life for experiments and fostered a view of the government as not demonstrating clear or consistent policies toward innovation. “Consequently sponsors, school districts, and particularly classroom teachers received little incentives and support to spend time and effort grappling with the complex problems of implementation” (Fullan & Pomfret, 1977, p. 388).

Fullan and Pomfret (1977) also maintained that during the 1970s the emphasis of federal government agencies was on obtaining adoption with relatively few resources allocated and used for planning an eventual implementation effort. With such a keen focus on adoption, the process of determining acceptance *by users* was frequently bypassed either due to lack of time, or because rejection or delay could not be risked. Additionally, the exigency of getting programs into the field meant that inadequate time was spent on specifying the operational implementation characteristics of the innovation (Fullan & Pomfret, 1977, pp. 387-388).

Unlike many other federally funded programs that paid less attention to the phase of implementation, however, several types of training opportunities for the implementation of MUSE/IPM were sponsored by the Wisconsin R&D Center, state education agencies, teacher education institutions, and school districts during 1971-72.

As shown above, these opportunities included: the train chain (national overview, state conference, local commitment, school leader training, and local staff training), specific workshops and institutes, and activities that schools, districts, or Leagues arranged. These extensive training opportunities provided reform-minded schools with the basis for mobilizing people and resources toward the implementation of MUSE/IPM.

The remaining three mobilizing factors – “need for a change,” “readiness,” and “resources” – pertained more to the staff at the building level than at the central office. The staff in IGE schools that would either coopt or discontinue MUSE/IPM during implementation or institutionalization had not been looking for an alternative to traditional education. Further, most of the staff were not involved in the decision to adopt IGE since the decision was made at a higher level, as exemplified in Davis School, Jefferson School, and Sawyer School (see Chapter 3). Not surprisingly, feeling no need for change, the staff was uninterested in training opportunities for the initiation of IGE. Moreover, the unsuccessful IGE schools acquired few IGE materials, had inadequate facilities for or did not utilize facilities in tune with IGE, and rarely called upon external support resources for initiation training. Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), more than 40% of 287 schools fell into this category. A school in this category would be called a “nominal” IGE school in the phases of implementation and continuation (Romberg, 1985).

The staff of another group of IGE schools that would either coopt or discontinue MUSE/IPM during implementation or institutionalization was similar to the above group. They had not been looking for an alternative to traditional education and were not involved in the decision to adopt IGE, since the decision was made administratively. Unlike the staff of the above nominal IGE schools, however, at least part of the staff of this group, frequently influenced by their principal, became interested in IGE because of the opportunities they saw for students (see Nelson Elementary School in Chapter 5). Frequently encouraged by the principal and supported by the central office, as exemplified in Sawyer School and North School (see Chapter 3), these schools acquired IGE materials, sometimes transformed traditional facilities into those in tune with IGE, called upon external support resources for initiation training, cooperated with team

members in initiating MUSE/IPM, and incorporated some elements of MUSE/IPM into their curriculum and teaching practices. However, less than 20% of 287 schools fell into this category (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972). A school in this category would be called a “marginal” IGE school in the phases of implementation and continuation (Romberg, 1985).

In contrast to the above characterizations, a majority of the staff in IGE schools that would successfully implement and institutionalize MUSE/IPM *had* been looking for an alternative to traditional education. These educators made a joint decision to initiate IGE, and often displayed a willingness to work extra hours and cooperatively in adopting the program (Ironside & Conaway, 1979, p. 42). As shown in the previous chapter, at Rise School the adoption decision was shared by the principal and staff. Thus, the chance of successful implementation of MUSE/IPM was higher at Rise School than at the other four. In addition, successful IGE schools either accumulated or were provided with IGE materials; they arranged for open space and had a library/IMC available for the purpose of IGE-related instruction; and they called on such opportunities as consultants, site visits, and several types of training for initiation. According to the research (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), less than 20% of 287 schools fell into this category. A school in this category would be called a “true or actual” IGE school in the phases of implementation and continuation (Romberg, 1985).

The number of IGE schools that were affiliated with the Wisconsin R&D Center increased from 165 to 450 (an increase of 285) between 1970-71 and 1971-72, and from 450 to 700 (an increase of 250) between 1971-72 and 1972-73 (Parker, 1977, p. 59). In order to answer the question, “Why did so many school districts adopt MUSE/IPM in a short time period?,” it is necessary to understand the characteristics of the school system. As Cuban (1992) noted, the unique organizational characteristics of this tax-supported public bureaucracy governed by lay policy-makers, combined with its strong desire to retain the loyalty of the system’s constituencies, help to explain the permeability of the system, or what Cuban labeled “vulnerability” to pressures for change from external groups. “External pressure, then, merges with an organizational drive to retain the faith of

critical supporters; such conditions prepare school districts to adopt innovations so as to be viewed as worthy of continued endorsement” (Cuban 1992, p. 240). This perspective also helps to explain why school districts in different parts of a state, region, and the nation resemble one another in structures, roles, and operations. To be too different from other districts risks questions about the credibility of the school district (DiMaggio & Powell 1983; Pincus 1972; Rowan 1982; cited in Cuban 1992, p. 240).

Case studies in the following chapter detail the processes that IGE schools went through during the implementation period after they participated in several training sessions, made decisions, and initiated MUSE/IPM.

PART THREE

**THE IMPLEMENTATION OF
THE MULTI-UNIT SCHOOL-ELEMENTARY
AND THE INSTRUCTIONAL PROGRAMMING
MODEL, 1971-1973**

Chapter 5

Four Schools Changing Over to IGE, 1971-73: Adapting or Implementing MUSE/IPM?

This chapter describes the implementation of IGE at local schools in four selected states (Connecticut, Minnesota, New Jersey, South Carolina) that made a contract with the R&D Center. With the purpose of showing the degree of and key factors in implementation of MSUE/IPM in each of these schools during 1971-1973, i.e., the *content* and *process* of implementation of MUSE/IPM, the description of these case studies will center on the following areas of school operation with respect to efforts to make a changeover to MSUE/IPM: backgrounds and initial steps in implementation, staff development, and MUSE organization and IPM instruction. These case studies were drawn from observations by ETS site visit teams led by Ironside (1972; 1973).

Nominal Model: Wilkens Elementary School, New Jersey

This first case study is about Wilkens Elementary School, where “top-down support” characterized the phase of mobilization and “co-optation” occurred during the phase of implementation. Cooptation occurs where “the staff adapts the project, usually emasculating it, to meet their own needs, without any corresponding change in traditional institutional behavior or practices” (Berman & McLaughlin, 1978, 16).

Wilkens Elementary School was not successful in the mobilization and implementation of MUSE/IPM in 1971-73, although this school might have been considered a potentially true IGE school based on Ironside’s questionnaire response. The school still had the atmosphere of a traditional setup, including self-contained classrooms and many problems unsolved, which makes it reasonable to call this school a nominal IGE school. It is worthy of note that there were a number of schools like Wilkens in the 1971-72 nationwide installation group that ended up as a nominal IGE school or discontinuing MUSE/IPM for a variety of reasons by the late 1970s.

Background and Initial Steps in Implementation

Wilkens was the only elementary school in the town with approximately 900 students in grades 1-7. The “building” was actually comprised of several additions to the

original, all connected by tunnels or doorways. This was particularly conducive to schools within the school, and plans were to take advantage of this situation the following year. On the other hand, this placed the library far away from the older children who would most likely derive greatest benefit from a library/IMC (Ironside, 1972, pp. 175-176).

In prior years, the school had many aides, some team teaching, and cross-grade groups in reading in grade two; in addition, exploratory work was done with the open-classroom in five grades in 1971-72. The principal and staff were most receptive to MUSE/IPM but at the same time felt that they already were practicing its basic elements. The principal became aware of MUSE/IPM informally, inquired about the R&D Center's plans, and then applied to New Jersey's department of education for inclusion in the installation scheme. The superintendent, and particularly the Board of Education, were supportive and helpful; this support included considerable expenditure for materials, travel, and summer 1972 workshops. The Board's formal monthly newsletter pushed the concepts and informed parents simultaneously. The superintendent went on record with this view: "Our participation in no way represents a wholesale adoption of a rigidly defined research model. On the contrary, flexible adaptation will be the rule" (Ironside, 1972, p. 175).

The open-classroom concept caught on here, to the extent that about two thirds of responding parents indicated their preference for it in May, 1972. There were probably not enough trained teachers to handle these numbers; also, there were ideological differences between open-classroom and MUSE/IPM. While some staff members held that both approaches were headed in the same direction, others saw MUSE/IPM as much more structured and bound to defined curricula, and thus they rejected it. They were different enough in conception that two distinct "schools" were planned for the next year and different enough in definition that parents had an actual choice to make.

The staff voted in January 1972 to proceed with IGE exploration and planning during the spring. A second vote was scheduled for June of 1972 to determine whether or not to implement MUSE/IPM formally in the fall of 1972. The superintendent insisted that such a vote be conducted, to be sure of staff commitment. This was doubly important since the state teachers association had raised serious objections to the implementation of

MUSE/IPM publicly. The state department facilitators contracted with a university to ascertain staff attitudes, opinions about priorities, preferences for teaming, and so on. A series of questionnaires (on a planned schedule) sought this information during the spring, and feedback to schools was planned for early fall of 1972 (Ironside, 1972, p. 175).

The district did as much as the school with respect to publications. A district letter and a board publication advertised the plans for the school and sought parent approval. The school held two meetings in May, 1972 (projecting plans for next term) attended by about 250 parents. These were separate meetings: one for IGE-standard and the other for open-classroom plans. In all, the Board, the district administration, and the school conducted informational activities, but of course they were concerned mostly with what was being planned for the following year. In May, 1972, parents were asked to indicate (in writing) their preference for open-classroom or standard-IGE for the following year. About two thirds of parents favored the open-classroom option (Ironside, 1972, p. 177).

Staff Development

1971-1972. The total staff at Wilkens saw various IGE films, were provided the booklets, and during the spring began meeting and planning as the IIC and units. A 1-day session in the winter served as an overview; a few teachers attended a reading workshop and other staff were at a League activity. The principal and unit leaders attended the formal staff development workshop (state-sponsored) in March of 1972. Unit meetings and full staff sessions rounded out this picture of “exposure” during the spring (Ironside, 1972, pp. 175-176).

The spring period of planning and setting up the MUSE structure amounted to the initial steps in implementation. While IPM-ing was only explored, MUSE was put into operation as the school’s organizational structure (Ironside, 1972, p. 176). The school did not consider that it implemented IGE as yet; the spring’s activities were directed toward the fall of 1972 implementation. IGE was anomalous: part of the MUSE structure was operative, and units were planning toward next year. The principal reported in the first questionnaire that “January/February 1972” was Wilkens’s date of becoming a

MUSE/IPM school, but with a footnote indicating “partial implementation” (Ironside, 1972, pp. 175-176).

The school’s IGE log revealed the following for a 3-year implementation period:

Year 1 (1971-72)...planning and preparation

Year 2 (1972-73)...begin IGE implementation, study materials, and evaluate.

Year 3 (1973-74)...individualize instruction and extend IGE (Ironside, 1972, p. 177)

A League existed and there had been participation by the principal and unit leaders; there had been no such functions for staff teachers or others. The principal felt that the League was “valuable” but that much more help was needed. IGE booklets were not in evidence during the visit by ETS staff, and several staff teachers indicated that the IGE films were repetitious and unrealistic. The staff saw once or twice IGE films in the winter but not since then. The principal used the I/D/E/A/ Implementation Guide, but not religiously. A number of resources came from the state coordinator, but since no IGE subject was operative, these were stored away for future perusal by the staff. The state office provided a detailed guide, but it appeared to be used minimally at Wilkens. There was little inservice training. In winter, faculty saw several films and held general overview meetings, but since then, inservice was limited to what might occur during unit meetings and little inservice took place (Ironside, 1972, p. 177).

1972-73. The potential for MUSE/IPM development appeared to be at about the same level, and no notable implementation advance was observed. This situation seemed best explained by the apparent fact that attitudes and conditions noted in the spring continued, and were not countered by decisive actions, plans, or changes. Both MUSE and IPM were perceived as “vague concepts” in this school; and most staff did not identify with these labels.

This situation seemed closely related to a major finding: Wilkens personnel had virtually no contact with other persons, schools, agencies, or materials related to MUSE/IPM. The state agency did not visit (in the fall) or provide other assistance. The school itself also remained aloof: no representatives to League meetings; no teacher attending a problem-oriented workshop sponsored nearby; no one visited neighboring schools. (As the principal said in referring to the latter, “What could I gain except their

problems?") Inservice training came to a standstill; the use of booklets and filmstrips in and by the "units" virtually ceased (Ironside, 1973, p. 28).

MUSE Organization and IPM Instruction

1971-72. Unit leaders were selected by the principal, and the IIC was formed in January, 1972. It became functional in March, with printed agendas, minutes, problems, and decisions. A great deal of IIC attention was paid to matters relevant to implementation: the units, parent education, study of materials, evaluation of attitudes, problems of teaming, and so on. At each IIC meeting, the group functioned at a high level of cooperation and effectiveness: decisions were made on the spot, but thoughtfully, while others were deferred; the agenda was followed; easy open discussion was the rule; the principal led but did not dominate. These IIC members were observed to be vocal, directed, cohesive, concerned, and cooperative. The meetings were open to all; and two or three staff teachers often attended. The IIC included the principal, unit leaders, assistant principal, librarian, and district curriculum director.

The principal selected staff teachers for each unit, and units met during the spring. Selection was based on grade levels and on open-classroom participation. However, the structure was altered in the following year. Two units encompassed open-classroom, one served the "regular IGE" grades, and one covered grades 6 and 7. There were no firm plans for multi-aging; this was up for discussion and decision. Units concerned themselves with planning, but it was not clear what this covered other than the study of math systems for possible adoption.

What this situation suggests was that the units existed but with little purpose. Children were not aware of the unit structure, and instruction was no different from the past. Unit teachers did meet to discuss common problems and perceptions, and except in rare instances they didn't plan or teach as a team. A unit of special teachers (music, art, and physical education) was formed, with the librarian as unit leader. Meetings became fewer and of less importance as they discovered there was little to accomplish except to pass on IIC decisions and concerns. The special teachers ran out of plans for the following year, and in fact a rumor developed to the effect that they would not be "wanted" the following year. The IIC moved to squelch that rumor at the meeting that

was observed. Art and music teachers discussed (but did not push for) a schedule whereby they would teach units on a workshop basis, thus avoiding the class-by-class scheduling problems that were bound to arise otherwise. They would teach in a given unit for perhaps five half-days and then move to another unit for the same sort of workshop (Ironside, 1972, p. 176).

Unlike the teamwork at the IIC level, units had a more *laizzez-faire* appearance; this was probably best explained by the fact that they had only general and miscellaneous planning to do rather than a precise set of goals to accomplish within the units (Ironside, 1972, pp. 177-178). The unit members didn't seem to comprehend (yet) what full implementation of MUSE/IPM would mean. Although the MUSE structure was organized, nothing was begun along IGE lines and virtually all instruction was carried on in self-contained classrooms. Although the Wilkens staff seemed to be concerned with individualization, a major problem was their split between IGE and open-classroom operations in terms of both current planning and philosophical bent. Teachers appeared favorably disposed toward individualization and useful change, but likely in quite different directions.

No IGE subjects were taught at Wilkens for 1971-72. In June, the IIC decided on math as 1972-73's IGE subject area for the school, but no firm decision was made as to program or system. Instruction remained in self-contained classrooms at the lower levels, departmentalized at upper levels (Ironside, 1972, p. 177).

1972-73. The situation by midyear of 1972-73 changed very little as compared with the spring of 1972. At an IIC meeting – maybe atypical that day -- that was observed, the principal did not show up; there was no agenda; the invited advisor from the district (on certain unit financial matters) discussed with two unit leaders but had no chance for decisions or binding plans, and he soon left; the alternate for a sick unit leader came, saw, and left; finally the observer left. Atypical or not, the IIC here seemed to be a “general” sort of committee then, not responsible for actually guiding the instructional program. This was quite a change from the IIC described the previous spring (Ironside, 1973, p. 29).

To be sure, there was considerable agitation and action relating to individualized instruction, but this was limited to one unit where all children were in “open classrooms.”

Academic progress was not assessed systematically there, however, and instruction was not geared to stated objectives (Ironsides, 1973, p. 28).

In another unit, it was not clear just what was happening. In the third, an individualized math program was adopted, and some teachers received training in it; the attitude was that this program was the ultimate, and that adopting it automatically would make this an "IGE unit." But there was no cross-teaching in this unit; very little sharing of materials, methods or purposes; and no instruction except in self-contained classrooms. Each teacher had his/her own goals and textbooks, and they were "playing with" individualization in reading ("Yes, we have divided each room into three reading groups, by their ability of course"). Three teachers independently implied that they did not ever expect to share children, rooms, resources, teaching skills, or "real" decisions about "my" classroom (Ironsides, 1973, pp. 28-29).

Probably the most telling observation was that a distinct rivalry had developed between the open-classroom unit and the IGE-unit. The IGE-unit group felt that the principal and IIC catered to the open-group, and as a result came to defend the traditional, self-contained, closed-door, textbook-oriented, grade-level, single-aged, teacher-dominated sort of education they were offering (Ironsides, 1973, p. 29).

Summary Statement

1971-72. Wilkens was visited only once – in May, 1972 – because of the state's installation schedule. Even though the school in some respects would not be implementing MUSE/IPM until the following fall, it had an active IIC, it chose an IGE subject area, it had a faculty and principal who were interested in individualization, the staff was organized into units, there were good informational activities with parents, and the administration and school board were strongly supportive. The principal reported January/February 1972 as the IGE initiation date, and yet principals in other school which were at about the same status indicated September 1972.

On the less encouraging side, Wilkens did not practice elements of the instructional programming model and, in fact, had just chosen the particular subject for IGE implementation the following fall. The units were formed (at teacher and subject levels), but the teachers had little to work toward. There was no decision yet on multi-

aging the units the following year; even if this would occur, there seemed a good chance that all instruction, except in math, would be in grade-level terms. The school lacked a sense of immediacy – “next week we begin” – and many headaches that might have been worked out through the spring of 1972 had not been. This left a good deal of trial-and-error for the fall of 1972. Some of this was no doubt explained by the lack of a firm commitment to MUSE/IPM prior to the June, 1972 vote on continuation (Ironsides, 1972, pp. 177-178).

The IGE-standard school and the open-classrooms school separation seemed highly problematic. Aside from the divisive personnel issues here, the division would harm IGE. One teacher wisely observed that “some standard classes were more open than the open[- classrooms], and vice versa”; but another teacher (who would be in an open-classroom) complained that while she wanted IGE math the following year, she wouldn't be permitted to use it because it's structured and pre-organized around objectives for all students. The librarian wanted the library to function as a full-fledged IMC; she wanted kids to use the space for their needs, to have quiet and not-so-quiet places for work and study, to have all materials and equipment available for use, and to have fewer “library instruction” classes and more use of the facility for work related to studies in the units. In her view, most of the staff did not share these attitudes. She anticipated a real difficulty in developing an IMC the following year (Ironsides, 1972, p. 178).

In sum, though certain MUSE/IPM implementation activities were undertaken at Wilkens, they were in terms of preparing for the 1972-73 school year. The preparation period was long, however, and the staff appeared to expect things to fall into place in September. Of the four “initiation criteria” announced by the R&D Center staff, the situation at the end of the second semester was as follows: 1) active IIC: yes; 2) multiaging of students: no; 3) operation of IGE subject-area: no; 4) full unitization: no (Ironsides, 1972, p. 178).

1972-73. Compared with the potential evident in late 1971-72, Wilkens Elementary's participation decreased markedly. Based upon the visit in May, 1972, Wilkens could not be called a MUSE/IGE school. At best it was low marginal, although good things were happening there. Indeed, teachers explored and experimented; a truly individualized math program was being implemented in one unit; the librarian set a

valuable tone in her domain; teachers indeed became more independent of “the office” and made some decisions as unit groups; the IIC was scheduled to assist in interviewing new staff members; and children appeared productively involved (Ironside, 1973, p. 29).

However, there was no semblance of the instructional programming model at Wilkens; the IIC appeared to have dissipated its energies and functions; contact with the outside world of MUSE/IPM ceased; there was little clear sense of direction about where – in IGE terms – this school was headed; and the school program, except for open classrooms, looked strictly traditional.

As for the librarian, that situation did not change. The librarian was bright, eager, child-oriented, and full of ideas for making the library into a true IMC. However, additional space was not provided, teachers were still reluctant to confer with the librarian about study-units, and most teachers still felt that the library was a place for “quiet reference and merely choosing a book.” The Wilkens librarian was not an IIC member this year, since the principal felt this would be an imposition on her time. The specialists-unit of which she was unit leader appeared to exist in name only; its main function was to meet so that she could distribute messages for the principal (Ironside, 1973, p. 29).

Of the eight “implementation criteria,”¹ the situation at the end of 1972 was: (1) Wilkens did not have an active IIC; (2) Wilkens had *pro forma* differentiated staff functions; (3) Wilkens had *pro forma* units; (4) the level of cooperation among unit teachers as a team was very low; (5) the level of commitment by teachers was very low; (6) students were not multi-aged; (7) IPM was not followed in WDRSD; and (8) the level of open communications within the school was very low (Ironside, 1972, p. 200).

In terms of key factors in the phase of implementation, (1) the level of utilizing external resources available for inservice was very low at Wilkens; (2) the principal, unit leaders, and unit teachers did not change their role relationships and expectations; (3) the principal did not turn his authority over to the units, nor unit teachers did so to the units; and (4) the level of school district support was somewhat high at Wilkens.

¹ The author selected these eight “implementation criteria” from the 12 major implementation areas included in an Installation Questionnaire by Ironside (1972, p. 138). These eight implementation criteria were chosen because of their relevance to the purpose of this study.

In sum, Wilkens Elementary School was characterized by “top-down support” in the mobilization phase and was not successful in the initiation and implementation of MUSE/IPM in 1971-73. Wilkens Elementary School was “co-opting” the reform (MUSE/IPM) during the phase of implementation by and large without changing the school in relation to any area of MUSE/IPM. It turned out that most of the schools like Wilkens in the group of 1971-73 nationwide installation either soon discontinued the practices of MUSE/IPM or maintained only the name of IGE to remain as nominal MUSE/IPM schools by the late 1970s.

Low Marginal Model: Union Elementary School, Connecticut

This second case study, Union Elementary School, was moving from “co-optation” to “mutual adaptation” during this phase of implementation in 1971-73, yet remained a marginal MUSE/IPM school. Union Elementary School was not successful in the initiation and implementation of MUSE/IPM in 1971-73 based on the eight “implementation criteria,” although this school might have been considered a true IGE school based on its responses to Ironside’s (1972) questionnaire. The school still had the atmosphere of a traditional setup, including self-contained classroom, although “open-space” units and all classrooms were multi-aged during 1972-73. Faculty expressed a considerable amount of resistance to IGE, its extension to other subjects, MUSE, and the principal.

Among the group of 1971-73 nationwide installation sites, a number of schools like Union Elementary ended up becoming “nominal IGE schools” in the phase of institutionalization. In these schools, either discontinuation or *pro forma* continuation of MUSE/IPM occurred into the late 1970s.

Backgrounds and Initial Steps in Implementation

A suburban, middle-class school of 575 students in grades K-6, Union Elementary in previous years had “cluster teaching,” some open classrooms, some teaming, and some flexible grouping. The principal felt that this school was close to MUSE/IPM in 1970-71 and saw these new patterns as a way “to spur the acceptance of change.” The staff, however, saw this as radical change. The principal attended a national meeting in 1971

and committed himself and school to MUSE/IPM. The District had a MUSE/IPM liaison, but no policy group (Ironside, 1972, p. 189).

Union Elementary knocked out some walls and made some open-space areas in 1968. The building had two floors with several open-space areas housing two whole units and parts of two others. This building consisted of many separate classrooms, a number of alcoves corners, etc., and small, centrally-located library. The library was small but quite well-stocked, serving many student needs for individual study, group study, reference, use of AV materials, instruction with aids, etc. In addition, small rooms for tutoring and projects in social studies and science were available. The librarian was very positive about IGE and hoped for increased space and opportunity to provide further support to instructional program (Ironside, 1972, p. 191).

In order to introduce MUSE/IPM to parents, Union's principal prepared a long letter to be sent home by way of children in November 1971. His letter gave some mention to the IIC, units, and individualizing instruction, and included an eloquent defense of multi-age grouping. Later that month, the school held open house that included special periods for questions and answers about IGE. In April 1972, a meeting for interested parents was held to explain the workings of the Wisconsin word-attack Design (Ironside, 1972, p. 191).

Staff Development

The principal, unit leaders, and resource teachers from Union went to state-sponsored training for principals and unit leaders in the spring of 1971. In April 1971, they were exposed to IGE filmstrips and books, followed by some discussion. In June, the special reading teacher was sent to the Wisconsin R&D Center for training in word-attack Design, and a local commitment meeting was held for the staff. They later held a Preschool Workshop for three days in late August. This workshop consisted of staff meetings, the IIC and unit meetings, and three hours with a consultant on Wisconsin word-attack Design. Otherwise, Union educators had little training or discussion and created no purposes or projected outcomes for their MUSE/IPM efforts. While the Preschool Workshop gave considerable attention to new teachers, it focused little on MUSE/IPM plans or operations. Staff impressions, later, were that this offered

inadequate preparation. Unit leaders were selected by the principal in May, 1971. The principal indicated that “selection of unit leaders” was the event which signaled initiation of MUSE/IPM. The principal chose reading and math as IGE subject areas (Ironsides, 1972, p. 189).

There was little or no schoolwide inservice training at Union Elementary after the Preschool Workshop, and virtually no use of consultants; if there was any inservice, it was planned by the principal. One unit reported its own inservice (ten hours), and another group met on a voluntary basis with the district leader to study the writing of behavioral objectives. The principal, unit leaders, and resource teachers all attended League training activities. One implementation guide was used, but only as a reference source. Staff made no visits to other MUSE/IPM schools, which were fairly close by, though the principal made one such visit. As one teacher said, “The principal was the only one who knew what’s going on on the Outside!” The principal reported no direct contacts to the state coordinator for assistance of any kind, though recalling that the coordinator made two or three general visits to the school (Ironsides, 1972, p. 191).

An unusual situation in Union Elementary was that each of its several resource teachers was assigned to a unit, although none was a unit leader. Roles were never clear, causing confusion with the unit-leader concept and with their supposed availability to all units in the school. The availability of resource teachers created a special opportunity in the school but also created special problems. Union’s resource teachers received extra monetary compensation but its unit leaders did not (Ironsides, 1972, p. 189).

MUSE Organization and IPM Instruction

1971-72. At Union Elementary School, the IIC was set up and began to function in September. At the beginning of the year, the IIC consisted of the principal, unit leaders, and the librarian; by May, the IIC had grown to include one kindergarten teacher, one Learning Disabilities teacher, and one other teacher. The reading specialist was not a member (though felt that she should be). IIC meeting agendas appeared more like notes and announcements, and were not regularly issued. Unit leaders expressed considerable emotion about their roles; they felt that they were seldom consulted on substantive matters, and that the IIC was just a way of passing announcements to the staff. “I’m just a

reporter,” said one. Ironside’s (1972) May questionnaire contained this footnote on the IIC questionnaire: “We don’t make decisions.” Attendance at meetings and examination of agendas remained the same through the year; a late October agenda listed a review up to that time with no provision for discussion, problems, and decisions. The December meeting was concerned with policies for visitors and parent volunteers, and a later one with school rules for children. Two notes of interest were contained in a winter agenda: “We want a list of all students reading below grade level,” and “All Wisconsin Design materials will be kept in my [principal’s] office. Some manuals are still missing.” Apparently, the IIC did not meet on a regular basis; often the principal met with the full staff or with separate units. Typically, all types of meetings at Union were principal-dominated and provided little opportunity for distribution of decision-making (Ironside, 1972, p. 190).

At Union Elementary, the principal selected unit leaders and staff teachers for 1971-72; there were no changes in unit leaders for 1972-73. Beyond the confusion surrounding the four special resource teachers, things never seemed settled. For example, while two units had aides, the other four had access to resource teachers. At the outset, kindergarten was not included in any way, but by spring a few primary children were spending a part of their day in kindergarten, and there was talk of moving some kindergarteners in the other direction the following year. Multiaging, itself, remained confusing (Ironside, 1972, p. 190).

Union Elementary had a slow change concerning multi-aging. At the outset, multi-aging occurred only in one IGE subject, i.e., reading, while the rest of instruction was pretty much single-aged in self-contained areas. By May, while much instruction was multi-aged in all subjects, the self-contained feature was maintained in four of six units. Two units used open-space for continuous grouping, employed team teaching, and shared resources – but others had not learned how to do much more than plan together. Much resistance and insecurity was observed in relation to teamwork, with growth evident in planning processes and use of materials. Unit members had one hour each day for meeting, though in the fall, they often skipped meetings if they had “nothing substantive” to deal with. No agendas were in evidence during the year. Two meetings observed by researchers in November were entirely concerned with teacher frustration and

dissatisfaction. Late in the school year, in both primary and upper levels, evidence emerged of better use of time and some effective leadership in working with IGE subjects. But by and large, though, unit meetings observed by the ETS staff became gripe sessions with the ETS visitor cast in the counseling role (Ironside, 1972, p. 190).

Preassessment in word-attack Design was completed at the end of October, 1971; grouping began in November in four units (the other two had math or vague individualization in language arts). A memo from the principal in November listed staff assignments (in word-attack) to skill areas and groups of students, and advised them that the first go would be for three weeks. By May, such decisions were made mostly in units, although with considerable input from the principal; recycling was still done on standard 3-week bases. One primary unit ended up assessing by “feel” rather than by testing. In spring, one grade (part of a unit) tested students in Wisconsin study skills program, and other units were to follow, on a grade-level basis, as announced. It was difficult to “see” IGE at work in visits, except occasionally in the word-attack program. There was scattered evidence of assessment, grouping, etc.; but as noted by the IIC in May, the school was not following the instructional programming model (Ironside, 1972, pp. 190-191).

Many Union Elementary teachers did not appear very knowledgeable about the classic models of MUSE and IPM, although on the whole they liked IPM better than MUSE. They expressed some feeling that while IPM might be good for students if done properly, MUSE was not good for them! Also, teachers were none too happy about the introduction of MUSE/IPM patterns that they had had virtually nothing to say about. They felt their principal had pushed this change on them, as other principals previously had done, making much of the principal’s need to have an “innovation for the year,” and change for change’s sake. Sample comments (staff and unit leaders) included: “Many decisions were made without our input about getting into this”; “Training? What training”; “How can you justify changing curriculum offerings and programs every year without giving the previous one a chance?” The principal, in contrast, was enthusiastic and committed. In the fall of 1971, he noted that “everything’s going along well,” though this was contrary to staff sentiment. By midyear, he noted teachers beginning to plan together, which was in itself important, and reckoned that 60% of his staff were

“agreeable” to the MUSE/IPM patterns, though none were “enthusiastic.” It seems he was correct – (based on attitudes expressed by 17 teachers at the same time) (Ironsides, 1972, pp. 191-192).

1972-73. The half-hour IIC meetings remained a disappointment. As was the case last year, these gatherings served as “faculty announcement meetings” more than anything close to the classical IIC. No instructional matters were considered; members sat at convenient distances from each other; the agenda included social events, PTA membership, and parent conferences; and the IIC meeting was dominated by the Union Elementary principal with virtually no interaction and no energy evidenced by others. The apparent purpose of IIC was to pass on to all teachers the matters discussed, make announcements, address problems, and so on. The only topic of substance was scheduling parent conferences. It became clear that the whole matter was the principal’s domain, including answering parent calls about rescheduling. Unit leaders made a suggestion or two about conferences, but these were not accepted (Note: Prior to 1971-72 there had been a faculty advisory committee, and when MUSE came along the newly-appointed IIC was asked to do “more than just instructional things” and took over previous “advisory” functions. This may explain the dysfunctional IIC in this school).

By the second year of implementation, the role of the “resource teacher” was still not clear at Union. As one resource teacher put it, “I’m a high-class aide, I guess. Frustrated. No, I’m not involved in IGE or multiunit, the others are.” (Note: This comes from an IIC member.) Besides her resource activities, this teacher taught all subject-areas in one unit except her field of special preparation (math). For this, she blamed the principal; the principal indicated that he blamed the superintendent. Clearly, Union Elementary School had a real problem in using personnel to the best advantage, even with its involvement in the MUSE structure (Ironsides, 1973, p. 31).

On the more positive side, by the end of the 1972-73 school year at Union, (a) all classrooms and “open-space” units were multi-aged, and all instruction was also. Two grade-levels were incorporated per unit. Plans were made to place a few kids from grades 1-2 into the kindergarten part-time but other than that, nothing more concrete was done in integrating kindergarten and primary grades; (b) the principal reported improved relations in one unit of four teachers. Where last year they hardly cooperated, now they at least

taught and worked in two pairs, creating two sub-units in effect; (c) in the grade 5-6 unit, much instruction was observed in language arts that appeared to be well-planned, well-controlled, and individualized. This unit worked together very well, and their unit meetings seemed productive, though no agendas were prepared. Members of this unit taught in an open-space area, and were observed working together continuously; (d) each unit decided how to assign instructional jobs. In one unit, three teachers managed science while in another, just one teacher took care of science; and (e) regrouping with the Wisconsin Design, done the previous year by the principal and reading specialist, was now the responsibility of each unit separately. All units went IGE with the Wisconsin Design in word attack skills, as did the kindergarten (Ironsides, 1973, p. 31).

There were some falterings as well, however. Not all teachers taught the Wisconsin Design, and those who didn't did not identify themselves with IGE or overall MUSE/IPM purposes. Also, the 5-6 unit staff members clearly assumed that Wisconsin Design was meant for grades K-4, and their students who were seen as "leftovers" who "should have finished it last year." This perception was inimical to the individualized instruction concept, yet the principal appeared to share this notion about "slow students." Further, despite the operation of sub-units, little evidence existed of unit planning or combined teaching and responsibility in these units as a rule; rather, one or two teachers planned, taught, grouped, etc. (Ironsides, 1973, pp. 31-32).

Ultimately, IGE in Union Elementary appeared to be defined almost exclusively in terms of the Wisconsin Design in word attack skills. It was not conceived in broader terms at the close of 1972-1973, and there was little evidence of teacher commitment to individualized instruction (Ironsides, 1973, p. 32).

Summary Statement

1971-1972. From the outset, and throughout the year everyone (the principal, teachers, and visiting researchers) noted a lack of communication among the staff at Union Elementary School. Morale was consistently and pervasively at a low level while the principal remained gung-ho. Plans for the 1972-73 year included IGE programming in three subject areas (reading, math, and ?) across all six units, despite the fact that by May, IPM had only begun to work effectively in three or four units, in one subject-area

(reading). Some growth was observed over the year in unit planing and sharing, in teaching multi-aged groups as a regular practice, and in the implementation of the IGE design in word-attack. Resources within the school were not articulated with each other or the overall IGE purposes, and resources outside the school were seldom called upon. Of 26 criteria considered reasonable to ask about, the IIC indicated that fewer than one-third were operative by year's end. Overall, IPM appeared to have gained a stronger place in this school than MUSE, although both were at a fairly low level.

1972-73. While Union Elementary appeared to be a low marginal MUSE/IPM school in 1971-72, it remained so in 1972-73. The second year brought a considerable amount of resistance among teachers to IGE, its extension to other subjects, MUSE, and the principal. This state of affairs was explained by a continuing weak relationship between the principal and staff (Ironsides, 1973, p. 32). On the other hand, IPM was functioning along program-model lines in the Wisconsin Design, and in two Union units there was a good working relationship among teachers. Moreover, the library/IMC was functioning quite well as a learning resource center (Ironsides, 1973, p. 32).

The principal at Union Elementary appeared to be committed and sincere, but held tight rein on the staff. He seemed reluctant to share decision-making, especially at the IIC level, though there were signs that units in 1972-73 had more responsibility and latitude. Major problems at Union included the underuse of "resource teachers" (who were paid more than unit leaders) and within-school communication (Ironsides, 1973, p. 32).

Of the eight "implementation criteria," the situation at the end of 1972 was: (1) Union did not have an active IIC; (2) Union had differentiated staff functions to some extent; (3) Union was fully unitized; (4) the level of cooperation among unit teachers as a team was very low; (5) the level of commitment by teachers was very low; (6) students were multi-aged to some extent; (7) IPM was followed in WDRSD at a very low level; and (8) the level of open communications within the school was very low (Ironsides, 1972, p. 200).

In terms of key factors in the phase of implementation, (1) the level of utilizing external resources available for inservice was very low; (2) the principal, unit leaders, and unit teachers shared changed role relationships and expectations at a very low level;

(3) the principal did not turn his authority over to the units, nor unit teachers did so to units; and (4) the level of school district support was somewhat high at Union.

In sum, Union Elementary School was characterized by “top-down support” in the mobilization phase and was not successful in the initiation and implementation of MUSE/IPM in 1971-73. Union Elementary School was moving from “co-optation” to “mutual adaptation” (or hybridization) between the reform (MUSE/IPM) and the school during this phase of implementation. Although “mutual adaptation” occurred in relation to the areas of differentiated staffing, unitization, and multi-aging, Union coopted the IGE model by and large without changing the school in relation to the areas of the IIC, shared decision making, teamwork in the units, communications, and IPM. It turned out that most of the schools like Union in the group of 1971-73 nationwide installation continued the practices of MUSE/IPM to remain as a low marginal MUSE/IPM schools by the late 1970s.

High Marginal Model: Nelson Elementary School, South Carolina

This third case study is about Nelson Elementary School where “broad-based support” characterized the phase of mobilization. Here, we find more “mutual adaptation” with the majority of MUSE/IPM components (such as unit organization and using IPM with Wisconsin Design word attack skills) and less “cooptation” with a few other components of MUSE/IPM occurring during the initial phase of IGE implementation in 1971-72.

With district and parental support and effective leadership by the principal, there was marked growth in both attitude toward MUSE/IPM and skill in implementing the patterns in Nelson. The IIC was functioning adequately and worked fairly hard to solve the recurring problems of morale and communications with staff teachers. Staff relationships were good, and units developed good working procedures for both planning and teaching. MUSE developed and blossomed more fully than IPM. The MUSE structure was planned at the outset and grew stronger through the year. By the end of 1972, the IPM was not being followed implicitly and there were difficulties in assessing, grouping, and instructing. These difficulties varied across units, however, and there were instances of close adherence to the model. While grade-level instruction was the rule,

such instruction was conducted via team planning and sharing as well as various groupings which changed periodically. Problems included relationships among the faculty, the lack of adequate inservice training before and during the school year for staff teachers, and teacher inability to move away from the textbook and single-grade orientations of the past; however, the problems surfaced, were recognized, and attempts were made to deal with them. Thus, Nelson deserved a prognosis of continued MUSE/IGE development.

Backgrounds and Initial Steps in Implementation

Nelson School lay within a large city district but had a mixture of suburban and distinctly rural students. Socio-economic status varied from very poor whites to elite whites with blacks in between. The school had about 700 students in grades K-5 and non-segregated faculty and classes. Nelson was strictly traditional in terms of building, program, staff, goals, and organization up until 1971. There had been no prior attempts at teaming, individualization, or any other MUSE/IPM feature. The principal learned about new patterns informally and applied to the South Carolina state department for IGE inclusion, and district and school commitment took place in April 1971. Nelson became one of several new MUSE/IPM schools in the city. District personnel had been generally supportive, and in fact had steered extra funds to Nelson for materials, addition of aides, and so on (Ironsides, 1972, p. 153).

At the district level, a local liaison was appointed early, and this person, along with the superintendent, attended all meetings of the formal training chain except a “national awareness” session. The liaison indicated “interest in team teaching and individualized instruction” as the major consideration underlying district adoption of MUSE/IPM. A district reading consultant was assigned to serve three MUSE/IPM schools. From visits as well as questionnaires, it appeared that both these persons had been an integral and continuing part of the installation effort at Nelson (Ironsides, 1972, p. 153).

The plans for MUSE/IPM implementation were apparently made early and firmly. The IIC was set up in June 1971. All IIC members attended the statewide staff development training in June and were able to meet and plan as the IIC. The librarian

was, from the beginning, an important member of the IIC. At a later time, the principal indicated that his conception of the “beginning point” of MUSE/IPM installation was the organization of teachers and students into functioning units. This had occurred on August 30, 1971 when school opened. A letter to parents (mid-August) provided an overview, credited both the R&D Center and /I/D/E/A/ for their input, and announced: (a) creation of the League of schools, (b) complete non-grading of the school, and (c) multi-aging (Ironsides, 1972, p. 153), and a meeting was held in August at which the state coordinator helped to explain the program and answer questions. Also, the weekly newsletter was used as a major means of communication between the school and parents during the implementation of MUSE/IPM. It contained miscellany, but almost always dealt with progress, plans, reports, or problems related to installation. Parents were told about visiting schools, about visitors from /I/D/E/A/ and elsewhere, about multi-aging, the new math program, and so on. In addition, a letter in August carefully outlined some changes which parents should expect. Parents were not asked about “going IGE,” but they were certainly kept informed (Ironsides, 1972, p. 160).

The school had benefited by earlier association with a college project in which a few of its teachers received special attention regarding team operations and individualization. (At the same time it took on MUSE/IPM, it continued with the college project and also moved toward full integration of a school population, approximately 70% of which was black) (Ironsides, 1973, p. 34).

The building had self-contained classrooms down the hall, in three wings, all on one level. A cafeteria was available (and sometimes used) for large-group instruction. By October 1971 the halls were filled with learning stations, separate desks, study carrels, and so on, but the fire marshall insisted on their removal. By January 1972, every other sort of space was being used; this included two appropriate hallway sections where blackboards had been installed. The library was not central, but access was not difficult. The library was about the size of two classrooms, well-stocked with books, audio-visual equipment, learning materials, special corners, tables, and so on. It had adequate workrooms for the librarian that could be used flexibly (Ironsides, 1972, p. 155). The library/IMC was in constant use for varied purposes. Children had scheduled visits by classroom, but were also free to use the facilities for projects, learning center activities,

and so on. Aides had various lessons with groups of four to ten in the library while all other activities were proceeding. The librarian encouraged such multiple use of the facility and reported increasingly valuable use by students (and a few teachers) (Ironside, 1972, p. 160).

Staff Development

The principal, unit leaders, the librarian and the reading consultant attended staff development training in June 1971. The principal also attended a meeting for state and district commitment. One day in the spring had been devoted to full-staff awareness and overview of the patterns. At that time, a vote was taken: all Yes except three. Two had been planning to leave, and the third one asked for transfer but later changed her mind and had since become “one of the better teachers” in 1971-1972. All staff, including unit leaders, teachers, special education teacher, librarian, and physical education teacher attended a Preschool Workshop held in late August 1971. Aides, however, were merely introduced and then were free to go (Ironside, 1972, pp. 153-154).

During this Preschool Workshop, the principal and reading consultant made long formal presentations which were very general in nature; and they left most details for “later on in the units.” As an overview for the staff, it was fairly weak and unstructured. The “One at a Time” film was also shown, without much comment nor discussion; and it was announced that if other films or strips were to be seen, that was strictly optional within the units. Each teacher received a copy of the two IGE books (Learning Program, Unit Operations), but no pep talk about them was provided. In all, MUSE was presented fairly clearly, but IPM programming was left vague. For new Nelson teachers, as well as those from previous year, the workshop gave little sense of what was in store or where the innovations were headed. However, the atmosphere was fairly relaxed and later on, time was spent in working out scheduling details (Ironside, 1972, p. 154).

Two circumstances were related to the foregoing situation. The reading consultant had had no chance to work with the Wisconsin Design for Reading Skill Development directly and dealt only on a hearsay basis. The principal made all decisions during the summer 1971: unit leaders, unit teachers, children assigned, locations in the building, basic schedules, hiring of aides. Thus, the staff felt no involvement in the decisions and

were equally unaware of the nature of the plans. They appeared to have confidence in the principal to carry it through, but had little grasp of some of the implications (Ironsides, 1972, p. 154).

The same might have been said of the unit leaders. At the IIC meeting, they were tentative, feeling their way in the new relationship with the principal. They sat stiffly in their assigned chairs, and had no questions to ask at the end of the first Workshop day. The IIC was merely a structure without function at that time and unit leaders obviously were waiting for the principal to ask questions or raise issues (Ironsides, 1972, p. 154).

At two of the unit meetings, teachers' concerns emerged. Multi-aging fairly floored upper-level teachers, and the planned movement of first graders from room to room was a problem. At lower levels, the main topic (scheduling) was discussed and resolved, as careful plans were laid for the first two weeks only. At upper levels, the main topics (grouping and multi-aging) were discussed less thoroughly, and that unit ended the day in some dismay. Several teachers indicated their lack of preparation for whatever was expected, and many clung to the notion of "my children' being farmed out to you" for a subject or an hour (Ironsides, 1972, p. 154). Once the Preschool Workshop got underway, units made decisions — as to moving children, reassigning within the unit, selecting subjects teachers would teach, and setting up the unit schedule (Ironsides, 1972, p. 154).

After initial training, Nelson was active in the state League of schools (and the principal was a member of its Hub committee). The principal, unit leaders, and the librarian attended several League training functions during the year, and, according to IIC minutes, reported back to the staff that these were valuable sessions (Ironsides, 1972, p. 159). In addition, the principal and one unit leader (chosen by lots) attended a R&D Center-sponsored mid-year training workshop. Using several implementation guides, the IIC developed its own informal timetable with emphasis on IGE programming. In fulfilling the goals, the school called on a variety of resources: state coordinator, district liaison, IGE printed materials, visiting consultants, staff from other schools, district reading consultant, and the League. Contact with these persons and groups was recorded in IIC minutes and represented continuing communication and effort (Ironsides, 1972, p. 159). Unit leaders and a few teachers made scheduled visits to other MUSE/IPM schools

in the vicinity, purposely choosing schools that were multi-aged and had separate classrooms down the hall in order to match their own situation (Ironside, 1972, p. 160).

Of the five units, three reported having inservice training within the unit, for a total of from three to five hours. Filmstrips were discussed, IGE booklets were used, and unit operations were considered, but the emphasis was on the IGE subject area (Ironside, 1972, p. 160).

Nelson was one of the schools that hosted a new crop of coordinators for a week's training and observation, under the aegis of /I/D/E/A/. Nelson was chosen by the coordinator because of its general implementation success and ability to serve as a working model; by the same token, the staff benefited from the experience of having visitors who themselves were students of the MUSE and IPM innovations (Ironside, 1972, p. 161).

Nevertheless, the great share of the MUSE/IPM preparation and training was directed toward the principal and unit leaders; except for what unit leaders might pass on, staff teachers were given much less opportunity to talk, study, improve skills, and so on. Further, there was very little inservice training in Nelson for the whole staff, and most of it took place in early fall of 1971. An IIC meeting in May took up the issue and all members agreed that training had been too little and of inadequate quality. Indefinite plans were discussed for improving the situation in 1972-73 (Ironside, 1972, p. 160).

In relation to overall training, the principal lamented the "thinness of expertise in our school," and felt that he and unit leaders were not able to take on staff training: "Staff teachers are getting it all third-hand and that is not acceptable." Not surprisingly, staff teachers as a group felt similarly. The May questionnaires revealed dissatisfaction with the timing and amount of training on the part of nine teachers; one indicated a need for a workshop "to give all teachers an idea of the workings of IGE...an overview of IGE and the total program" (Ironside, 1972, p. 160).

MUSE Organization and IPM Instruction

1971-72. The MUSE structure covered all children and teachers (except special education and kindergarten) and multi-aging was incorporated from the outset. Each of five units had a full-time aide available at the beginning of school who began as a non-

instructional aide (in spite of some being certified teachers), but quickly graduated into responsible work with children and materials along with other duties (Ironsides, 1972, p. 160).

Unit leaders were selected by the principal on the basis of several criteria; the principal indicated satisfaction with that method and reported that no changes were contemplated for 1972-73. The IIC met in June and August, 1971, and thereafter on a weekly schedule. Whereas the unit leaders were hesitant and insecure at the outset as to the real meaning of IIC decision-making, they grew through the year into a cohesive and meaningful group. In October 1971 the IIC's main concern was scheduling of all sorts, including recess, unit blocks, special teachers, and planning time. This appeared to reflect unit leaders' hesitancy to work on more substantive matters such as the use of available consultants or reporting to parents. At the same time, the principal continued to take initiative in the meetings and announce what amounted to his decisions on many matters. He seemed to be doing what he felt the unit leaders were not yet ready to do (Ironsides, 1972, p. 155)

By midyear, the unit leaders became a quite different group: they began to exert pressure on the principal to eliminate letter grades, but the principal was slow to take action or attempt change. Ironically, and interestingly, the tables were turned: earlier the principal had in effect thrust new leadership roles onto the unit leaders and now they were in turn pressing him for needed decisions to make MUSE/IPM work. Further, the unit leaders were indicating to the principal that teachers were working too hard, and two IIC meetings were devoted to discussions on slowing down the pace. Further, the principal was clearly not aware of many details about unit operations at Nelson (e.g., whether all teachers taught a given subject or all children). There were obvious objections to this state of affairs, but also the principal trusted unit leaders to be on top of things in the units. On that point, both the principal and some unit leaders noted that unit leaders did not like the role of the "straw boss." The unit leaders looked to the principal for help in communication and authority on various matters, and the principal responded by having two or three full faculty meetings to remind them of the school's total commitment and to get away from having communication only via the unit leaders (Ironsides, 1972, p. 156).

The matter of communication was apparently a recurring problem. The minutes for a December IIC meeting contained “Principal’s Directive: Clarifying Communications”:

The principal directed unit leaders to establish the following policy relating to unit activities: (1) all ideas affecting unit operations will be discussed and agreed upon by the entire unit during a unit meeting, with the unit leader presiding; (2) ideas that need to be cleared with the principal will be handled by the unit leader and principal; and (3) when ideas are brought to the principal by a staff teacher, that teacher will be referred back to the unit leader for appropriate unit consideration of the problem. (Ironsides, 1972, p. 156)

In May 1972, the IIC continued to be a solid, decisive group, outlining school problems and laying out plans for the next year. One observed example of the principal’s strategy was to quietly wonder whether scheduled recess was outmoded; unit leaders responded with discussion and decision to take it back to the units prior to a determination. The IIC made a decision to include two or three staff teachers in every IIC meeting in 1972-73 in order to improve communications and to let teachers see the decision-making process at work (Ironsides, 1972, p. 160). By the end of 1971-72, the principal and unit leaders indicated their satisfaction with their new roles. The principal was easy-going but direct and determined about MUSE/IPM success; the unit leaders shared his enthusiasm and commitment. The unit leaders (four of the five) knew how to function in the IIC, and wished to continue in the unit leader role (Ironsides, 1972, p. 156).

At the unit level, time was arranged for each unit to meet 30 minutes per day for planning, sharing, and working (Ironsides, 1972, pp. 154-155). Most meetings were well-led, generally productive, and open for full participation. In these respects, the primary unit was outstanding, and the others were very satisfactory (Ironsides, 1972, pp. 156-157). Units were expected to keep logs but this was a responsibility for which there was little time or inclination (Ironsides, 1972, p. 158).

Multi-aging had been a concern at the outset, particularly at the upper levels. By the end of 1971-72, while still a concern to some, it was taken for granted. On at least three occasions, multi-aging was credited with allowing the flexibility of attitude needed to solve certain social problems: children were placed in other units and then began to behave, learn, and succeed (Ironsides, 1972, p. 157). However, all classrooms were on a grade-level basis, as were units; though for two units walls had been removed in order to allow for a flow of activities (Ironsides, 1973, p. 34).

Partly because of the building's structure, and partly because of personal approaches, there was very little actual team teaching in this school where two or three teachers dealt at once with the same group of students. However, the psychological walls between rooms slowly tumbled during the year; the units increasingly planned and arranged together; teachers shared ideas and made use of more free flow of students, texts and materials much of the time; and most teachers became less preoccupied with grades and grade levels. Though separate classrooms were the rule, the halls were busy with cross traffic (teachers and students) between rooms within the unit areas. As few as eight or as many as 80 students were taught at one time in unit activities (Ironside, 1972, p. 157-158).

Still, differences across units were observed. For example, an upper-level unit had all four teachers teaching reading, math, social studies, and art and there were "specializations" only in science and language arts. Such decisions and use of personnel were within the purview of the individual units (Ironside, 1972, p. 157). In a third unit, all teachers taught all subjects and nearly all children. At one point in the case of math, two teachers each had 30 students, discussed teacher strengths and student needs, and worked out a new pattern: one teacher taught 40, while the other took on two groups of ten – "Something we wouldn't have dreamed of last year" (Ironside, 1972, p. 157).

On the other hand, the four teachers in the primary unit were departmentalized across all subjects; except for reading and word attack skills, a given subject was taught by one teacher only. They organized their four rooms as follows: one for assembly of all (N=110); two for organized instruction of various-sized groups in and out all day; one for a variety of subject-areas learning centers (Ironside, 1972, p. 157). This was achieved with the help of the district reading consultant during a primary unit meeting at midyear. The reading consultant encouraged regrouping in skills areas, and it became evident to the teachers that they had been teaching story-reading without knowing what the others were doing...using the same books, same techniques, and in effect wasting resources. Being stunned at this realization, they regrouped themselves and the children immediately (with appropriate social and skill considerations) (Ironside, 1972, p. 158).

Though separated at the outset, by midyear the special education children were partially incorporated into the several units. The arrangement was not irreversible, but it

permitted placement for part of the day and involved the inclusion of two special education teachers in three unit organizations (Ironsides, 1972, p. 158).

Finally, Nelson experienced human relations problems along the way. The “freedom” each unit had to structure its resources was a partial answer to some of those difficulties; and as the year progressed, some teachers tuned in more as they saw students busier and happier, realized four teachers could provide more than one, and found the whole situation less threatening. The principal and reading consultant together worked out means by which certain teachers kept their individuality (their own styles, their pet projects, etc.) without sacrificing the purposes of team planning and effort. One way was to find a personal project for each teacher in the unit; another was to ask teachers to begin planning for other subject areas (objectives, materials, etc.) in committees where unit leaders were not eligible to serve as chairmen (Ironsides, 1972, p. 158).

The word attack skills component of the WDRSD was chosen for implementation in summer 1971. Preassessment was conducted in September and in all units, students were then grouped for skill instruction. Two units continued fairly smoothly through the year, but two others came to a point of discouragement, dropping it for two months or so before picking it up again. After retesting in January, they proceeded for the remainder of the year (Ironsides, 1972, p. 158).

The value of the Wisconsin Design for providing an instructional framework was recognized: it served as a basis for understanding the programming concepts of objectives, assessment, grouping, and instruction. There were problems, however, in relating materials to children’s needs, in recording progress, and in feeling comfortable about regrouping (Ironsides, 1972, p. 158).

In October, teachers from three units indicated that they felt it important to vary the IGE approach with word attack skills. They did not limit the program to a prescribed time (e.g., two weeks) per skill per group, and did not teach a given skill every day. Without such variation, they felt the approach would be too mechanical. By May, the system had pretty well smoothed out in all units, and regrouping was accomplished easily and efficiently (Ironsides, 1972, p. 159).

There remained variations, however, as revealed in the detailed questionnaires. Four of five units reported that that they continued to group on general ability criteria

(high, medium, low) while also grouping on the basis of skill assessment. Three units reported teaching “groups of changing composition” but two others had “regular groups based on general ability” as their typical teaching approach in word attack skills. Moreover, the IIC indicated that “presenting the IGE subject along the lines of the instructional programming model” was not an activity at work but a goal for the following year. The IIC also reported that while 75% of its time was directed to “general management and personnel relations,” only 10% was devoted to “monitoring IGE implementation” (Ironside, 1972, p. 159).

Very slowly through the year, IGE programming and the example of the Wisconsin Design began to influence work with other subjects. There continued to be emphasis by some teachers on particular textbook coverage and reference to “grade-level” work – but by midyear one unit was regrouping students in science and social studies (on “general” bases) and another was making gross judgments for grouping and regrouping students in math. They recognized that they were not following any strict model, but needed to move very slowly (Ironside, 1972, p. 159).

By May there were two outcomes related to these efforts. First, IMS (Individualized Math System, a published curriculum) was selected for adoption in 1972-73, and placement testing was scheduled for late May. Careful planning was done with the help of the district liaison: how best to use aides, what supplemental materials to have available, how to keep records. Second, some teachers were meeting after school – on their own time – to work out gross and refined objectives in social studies, science, health as a prelude to continued expansion of IPM principles (Ironside, 1972, p. 159).

As to reported attitudes, the principal felt in May that 75% of the staff were enthusiastic about both MUSE and IPM, 15% were agreeable, and 10% neutral or cautious. His own feeling was enthusiasm for both MUSE and IPM. Of 19 teachers responding, 18 reported agreeable and enthusiastic attitudes about the new patterns, reflecting the principal’s assessment. One teacher was obviously very unhappy, moving from enthusiasm in September to caution in May with a footnote about “being on the bottom of the chain of command” (Ironside, 1972, p. 161).

1972-73. Nelon Elementary was maintaining a healthy and active IIC. Units were still organized strictly by separate grade-levels. There was some staff resistance to the

notion of wholesale multi-aging, as well as quite thorough lack of ideas on “how to do it, if it is a good idea.” The principal acknowledged lack of confidence in his own ability to make it work, but saw the “value of it.” The net result was that all instruction was to single-age groups, and teachers stuck with the same materials, books, and plans they had always had since they felt that there was security in that (Ironside, 1973, p. 34).

The IGE subject at Nelson was language arts; instruction did not follow the programming model, however. In language arts, math, and history classes, small-group instruction prevailed in a somewhat free-floating atmosphere, where teachers, student-teachers, and aides constantly moved about giving help or direction. Since three units had double-room areas, 45 to 70 children were taught at same time, each subgroup effectively ignoring the others for the most part, and teachers obviously proceeding by plans, not whims (Ironside, 1973, p. 35). In addition, efforts were made to incorporate IPM in reading. ABC’s “READ” program was in use, but, as the supervisor noted, “not the assessment or diagnostic part. They have trouble with that kind of an idea.”

Summary Statement

1971-72. Overall there was marked growth in both attitude toward MUSE/IPM and skill in implementing the patterns in Nelson. The situation looked “questionable” at the time of the Preschool Workshop, but great strides were made during the year as the guides were followed, as the IIC leadership potential was developed, and as outside resources were called upon for assistance. This school was serious about its commitment to change (Ironside, 1972, pp. 161-162). Parent and community relations were successful and communications were regular. The district administration was also supportive – in terms of money, personnel, and training (Ironside, 1972, p. 162).

MUSE developed and blossomed more fully than IPM at Nelson. The MUSE structure was planned at the outset and grew stronger through the year, and the IIC worked fairly hard to solve the recurring problems of morale and communications with staff teachers. Unit teams developed skills in planning and sharing, and indicated in May their preference for working as units and teaching together. The IPM, however, although begun with the word attack skills component of WDRSD, was as fairly rooted. By the end of 1971-72, the IPM was not being followed implicitly and there were difficulties in

assessing, grouping, and instructing. These varied across units, however, and there were instances of close adherence to the model. The prognosis was good, moreover, because of the selection of a packaged curriculum in math for the next year which itself follows the instructional model (Ironsides, 1972, p. 162).

Problems which continued to concern the staff included human relations in the faculty, the lack of adequate inservice training before and during the school year for staff teachers, and teacher inability to move away from the textbook and single-grade orientations of the past. Again, in all cases, the prognosis was good – since the problems surfaced, were recognized, and attempts were made to deal with them (Ironsides, 1972, p. 162).

1972-73. Nelson Elementary maintained both the successes and difficulties of 1971-72, and deserved a prognosis of continued MUSE/IGE development. While grade-level instruction was the rule, such instruction was conducted via team planning and sharing as well as various groupings which changed periodically. Staff relationships were good, the IIC was apparently functioning adequately, and units developed good working procedures for both planning and teaching. They “think as units” and did not just “go ask the principal” (Ironsides, 1973, p. 35).

Of the eight “implementation criteria,” the situation at the end of 1972 was: (1) Nelson had an active IIC; (2) Nelson had differentiated staff functions; (3) Nelson was unitized except for special education and kindergarten; (4) unit teachers collaborated as a team mildly; (5) the level of commitment by teachers was high; (6) students were multi-aged at the minimal level; (7) IPM was not followed in WDRSD; and (8) the level of openness of communications within the school was moderate (Ironsides, 1972, p. 200).

In terms of key factors in the phase of implementation, (1) the level of utilizing external resources available for inservice was high; (2) the principal and unit leaders shared changed role relationships and expectations, though the unit teachers shared less; (3) the principal turned his authority over to a large degree to the units, while unit teachers did less so; and (4) the level of school district support was high at Nelson.

In sum, Nelson Elementary School was successful in the initiation and implementation of MUSE/IPM in 1971-73, although the school had some problems unsolved. At Nelson Elementary School, “mutual adaptation” between the reform

(MUSE/IPM) and the school (or hybridization) occurred during this phase of implementation. Change in the school was manifested in the IIC, differentiated staffing, unitization, and shared decision making at the IIC level, while they adapted the IGE model to the local setting in the areas of multi-aging, teamwork in the units, and IPM. It turned out that most of the schools like Nelson in the group of 1971-73 nationwide installation continued the practices of MUSE/IPM and remained as a high marginal MUSE/IPM schools by the late 1970s.

True Model: Birch Lake Elementary School, Minnesota

This fourth case study describes Birch Lake Elementary School – a school that had received “broad-based support” during the phase of mobilization, and where “mutual adaptation” between the reform (MUSE/IPM) and the school occurred during the phase of implementation.

Birch Lake Elementary was successful in its mobilization and implementation of MUSE/IPM in 1971-73. The IIC functioned well, units planned and taught together very well, IPM succeeded in word-attack, was progressing in math, and extended into other subjects, and its IMC was an exemplary instructional center. There were no aides, but many student teachers and support staff were available, including a reading teacher, the IMC director, and special subject teachers. This school called on other resources less than many; probably because it had done so the previous year; and as a whole, its staff felt quite confident. There were a few problems to iron out, such as lack of planning time and shortage of teaching materials, but by and large it appeared that this school could proceed fairly independently into the phase of institutionalization, given that the staff was dedicated and that the principal had a clear vision in directing the implementation (Ironside, 1972, p. 200).

Backgrounds and Initial Steps in Implementation

Birch Lake Elementary School served about 700 students in grades K-6 coming from communities ranging from suburban to urban. This school was chosen to be a pilot school, the only MUSE/IPM school in the district. Birch Lake began incorporating innovative elements in 1968; by 1970-71 this school was already a MUSE/IPM school on

a semi-formal basis. During 1970-71, a multi-unit approach was used at the primary level; there was little individualizing, but teams were formed and operated as units with unit leaders. The IIC began functioning in June 1971 and made decisions to use Wisconsin word-attack as its IGE subject and math as a secondary subject. Also, unit leaders and team members were named in June. The school decided that all teachers in a unit would teach all subject areas. The school's own timetable was prepared in August; and the IIC and units developed groundrules for roles, meetings, and purposes as well as rules for children (*vis-à-vis* open space and new programs). These rules were printed in handbooks for teachers and students that included careful explanation of new setup, expectations, schedules, etc. For teachers, the handbook included detailed outlines of unit roles and responsibilities as well as options; the handbook included checklist for team and inter-team relationships (the latter was a problem from previous years). For students, the handbook included a notice about wearing school buttons and an open invitation to use the IMC freely at all times.

The principal became aware of MUSE/IPM and had a chance to "join" through attendance at a college-sponsored introductory meeting. The principal and unit leader training was held in July; staff awareness and commitment meeting followed. Written reactions were studied, decisions were made over summer, and policy was enunciated for the 1971-72 school year as a result. Formal district and school commitment took place July 1971. This school went far enough along in its involvement to have printed (by September 1971) an extensive PR booklet, outlining MUSE and IPM elements, naming the IMC, listing unit leaders, and providing a schedule; and to have made extensive structural changes in the building prior to school's opening in September. Clearly, the school had a headstart in implementing MUSE if not IPM (Ironsides, 1972, p. 195). The principal indicated later that he could not specify what constituted the "beginning point of MUSE/IPM" since "we were operating under similar ideas and organization for one year" (Ironsides, 1972, p. 196).

The district had a strong curriculum committee, which in effect served the district policy function regarding MUSE/IPM in the one school. The district had a definite inservice schedule, and devoted summer work to development of objectives and outlines in reading and math. Both activities were relevant to later events (Ironsides, 1972, p. 195).

The plant was a circular building with classrooms ringing its perimeter. Rooms were grouped by units, with half-walls between rooms: a partly open space arrangement. There were full walls between units. On one floor, mostly carpeted common areas were located in the center of the building. As a result of remodeling in summer 1971, the library and the IMC were joined, providing a tiered amphitheatre area with much storage space for materials and workrooms. The library/IMC was large, well-stocked, staffed (full-time, part-time, and volunteers), and was fairly central to all six unit areas. It had learning centers, a separate reading-study area, open shelves, A-V devices, and materials. from self-contained classrooms and closed-door library. This facility was designed to be an always-available learning resource, open to free-flow use by students and teachers. In fact, dozens of children were observed in and out, using materials responsibly. IMC director was in tune with IGE philosophy (Ironsides, 1972, pp. 196-197).

Staff felt parent contact had been weak in 1970-71. Units sent separate letters to parents in August, explaining changes, schedule, units, individualization, and other items. Each unit set up a specified weekly time, when parents might call in with questions. This continued through the year. An October letter to parents from the principal included general information, opportunities for tutoring, and special help in language arts areas. Also in October, the principal sent brief questionnaire to parents asking about reactions, indications of benefit to the child up to then, etc. It was not known how much response was gathered. There were various coffees and general PTA programs, but no special efforts to sell MUSE/IPM. However, one unit had a morning program on reading where parents sat with their kids for instruction; 75 parents were present (Ironsides, 1972, p. 199).

Staff Development

The staff attended college-sponsored conferences and viewed IGE films and strips in 1970-71. The staff also participated in an one-day local commitment/awareness session. The principal and unit leaders attended a state-sponsored staff development workshop in July 1971. (The principal rated as “good” and felt unit leaders were especially helped) They noted that the program did not include time for school’s IIC to meet and plan as a group.

The total staff attended a Preschool Workshop held for two days in September 1971. The workshop agendas had four emphases: IIC meeting, general staff meeting, introduction to Wisconsin word-attack design, and lengthy team meetings. The workshop was more a planning session than one devoted to training. Much time was spent discussing previous year's reactions, and how the IIC in summer had made policy on many such matters as: team assignments, children's options, use of materials, "rules" for unit and IIC meetings, visit policies, use of open space areas, etc. At the IIC meeting, unit leaders reminded the principal of other important matters to be taken to full staff meeting. Primary units (with experience previous year) moved smoothly through planning, scheduling, teaching assignments, parent communications, etc. The unit had good leadership and open communication, and the meetings were productive. One unit got into detailed planning of science instructional unit. Showing lack of experience, intermediate units spent most time planning activities for first two days of school – in detail – and seemed quite unsure of their roles and where the units were headed. There was open communication, but weak understanding of the priorities (made a big deal, for example, of arranging chairs in the open space rooms). At the end, all units worked out "team groundrules" (Ironside, 1972, p. 196).

The principal called on the state coordinator for training materials and assistance with IGE subject. Visits to other MUSE/IPM schools were made in fall 1971. Very little was mentioned of League activities, though the principal did attend one League training session. The principal, unit leaders, one special teacher, and reading teacher attended a R&D Center-sponsored one-week unit leader training workshop in October. The reading teacher attended a R&D Center-sponsored reading workshop in which mutual support sessions with staffs of one or two other MUSE/IPM schools were held. R&D Implementation Guide was used as resource and checklist for progress at Birch Lake (Ironide, 1972, p. 198).

Various training materials (films, booklets) that were not available during the Preschool Workshop became to be used. The IMC was open to kids and teachers as instructional resource. Special reading teacher was available for "problem cases"; apparently this teacher was incorporated into MUSE/IPM only to small extent. Unit inservice was not the rule. Three units reported one-hour inservice (for whole year), one

unit reported two and one-half hours, and three units reported none. IGE films and strips were used at times. School-wide inservice took place several times, in one case two days, another for one day, several an hour or two. With the state coordinator present as an observer, the first session in November involved viewing of filmstrips and “Tuesday” film, and unit solving of problems posed in film. The unit leaders reported their recent unit leader training (goal setting and student assessment in the unit), followed by two hours of unit meeting to work out assessment of “unit” accomplishment against criteria in the R&D Implementation Guide. Many teachers criticized filmstrips for their unrealistic parts, but also acknowledged that seeing them a second time “they made more sense.” Another inservice day included IGE films, teamwork on math and reading procedures, and development of IGE-type instructional units in science and social studies. Sessions were dovetailed into district’s own inservice schedule so that purposes of non-gradedness, continuous progress, etc., could be dealt with and IGE materials could be used. The district required four full days for this kind of inservice. While staff reported benefit at the time of the training, later both the IIC and whole staff had severe criticism of the inservice. Comments at formal meetings included, “inservice took too much time,” “wasted time,” “just makes the school year that much longer,” “benefits were minimal.” Real fuss apparently was over extra time involved rather than lack of assistance or direction provided. There were no aides in units; however, student teachers were regularly involved (Ironside, 1972, pp. 198-199).

Plans were laid in February and finalized by May to pay teachers for a series of planning and writing sessions in summer 1972. Teachers developed instructional materials in science, social studies, and reading; also objectives. It was hoped to get these as close to the IGE system as they had gotten math last summer (Ironside, 1972, p. 199)

MUSE Organization and IPM Instruction

The IIC was composed of the principal, six unit leaders, unit leader of special subjects, and IMC director. All meetings were open to staff teachers, but only some attended. Late spring 1971 teachers named three others whom they wished to team with, also named choice for unit leader. Based on resulting sociogram, the principal selected unit leaders and team composition; virtually all were satisfied with the outcome. Same

unit leaders were selected for 1972-73. Several inter-team meetings were held to avoid misinformation and generate consistency and unity. The IIC agenda, usually four or five items, were announced to all by daily bulletin. No IIC minutes were kept. Much that was decided was spread by word of mouth; records on inservice, aide's roles, IIC plans, etc. were nonexistent. The IIC developed timetable in August; felt they were on schedule. The IIC reported 60% time on school management, 5% for monitoring IGE, and none for aiding units in instructional programming. The IIC meetings were characterized by effective leadership by the principal, give-and-take, productive use of time, participation by all. Lack of log made it hard to know what actions were taken; many topics were discussed but not resolved, while on others decisions were made. No particular growth was noted, since from the outset the IIC was cohesive group, the principal was receptive, unit leaders appeared to understand their roles, and decision-making was decentralized. Topics of moment included: moving kids from primary to intermediate units for fall 1972; inservice (quality, amount, and need for); instructional materials needed for science; resource committees to work in the summer; previewing of training films; and unit goals. Daily bulletin also had separate notes to units, written by the principal and not necessarily product of the IIC. This included announcing inter-team meetings (three intermediate teams or three primary teams) (Ironsides, 1972, p. 197).

Units had two hours per week for planning as a team. Units were structured to include these grade groups: K-3, K-3, 1-4, 4-6, 4-6, and 5-6. Within units, kids selected own homeroom teacher with few exceptions; usually siblings were in the same unit to facilitate records and conferences. Units were organized in semi-open space areas. By midyear and May 1972 visits by ETS staff, a good deal of instruction was carried out by teams of teachers and aides working together with varied groups of kids, whether or not with IGE subjects. Areas were noisy, but controlled and organized. The team approach was not new this year for most teachers, and not only did they plan and decide together, they taught together. Units decided which subject a teacher would specialize in; she would lead (e.g., science) and others would assist. Group planning was necessary, therefore, in all subjects. Tendency for this was breaking down, and the "lead" teacher did most of the work alone by year's end. Still, all teachers in all units taught all subject areas to some extent; and taught at least 50% of unit's students. For IGE subjects (math

or word-attack) teachers did plan together regularly. One problem in units – where kids were used to more free-wheeling approach – was presentation of music as a structured “classroom subject” for a detailed period of time. Disruption was noted. This problem was not solved during 1971-72. Another problem also not solved was scheduling enough unit planning time (Ironside, 1972, p. 197).

Apparently there was little or no individualization in the previous year; taking on Wisconsin word-attack (primary units) and math (intermediate units) was pretty new to all concerned. Used their own math “system” this year. In word-attack in particular, groups of various sizes were taught, with changing composition as kids tested out of skills. Different modes (or at least emphasis) of instruction were observed, and this seemed typical. In reading and math (and other subjects, too) permanent problem was lack of varied materials. Using “same old texts and workbooks” and apparently not \$ enough to purchase extensive new materials. Nonetheless, a definite effect (by May) of transferring to social studies and science was observed; for example, the “IGE approaches” was used in math or word-attack (some assessment, pacing, small group instruction, and various materials). In November, units were still struggling with assessment techniques. They were not happy with their procedures. By year’s end, primary units were following instructional programming model in word-attack; intermediate units were not able to do so well with math because “system” was not complete. However, one unit did report regrouping (spring) in terms of assessed progress in math. Detailed record forms were developed for math and word-attack (Ironside, 1972, p. 198).

Visitors and teachers alike credited the principal with ability to develop cohesiveness and unity in staff, to help things move smoothly, to encourage independence on the part of staff and kids. There was a spirit of mutual trust. The principal reported that some teachers resisted the unit leader role, but these were few and seemed to resist most change. Negative feelings were far weighed by positive. Even so, the principal’s estimate of staff attitude toward MUSE and IPM was: 60% enthusiastic toward MUSE, 30% agreeable; and 35% enthusiastic toward IPM and 45% agreeable. These were borne out by individual staff responses. Apparently there was much enthusiasm toward individualization, continuous progress, teamwork, etc., but not

necessarily in MUSE and IPM terms. Staff in general seemed comfortable in the IIC and units and staff meetings – participated, criticized, worked together for “better school.” They felt that they were a part of problems and decisions and it was “their school.” Special mention by staff of positive feeling toward multi-aging was noted: its benefits to kids and their own new learnings about broad curriculum. Children evidenced positive feelings on the whole; they liked having several teachers and chance to use IMC as needed. Multi-aging worked from kids’ point of view. School atmosphere and staff/kids’ attitudes did not appear to change through the year; stationary at quite high level of enthusiasm. Building and facilities no doubt contributed. Negative feelings were expressed regarding length of school day, time pressure to do the job, too much inservice, etc., but even so, most would not want to return to self-contained classroom (Ironsides, 1972, p. 200).

Summary Statement

Not surprisingly – in view of past experience here – Birch Lake Elementary School seemed from the outset to be setting a high standard in implementation of MUSE and IPM. The IIC functioned well, spirits were high, units planned and taught together very well, grouping of units was done by teacher preferences, IPM succeeded in word-attack and was progressing in math, IGE-ness extended into the teaching of other subjects, and IMC was an exemplary instructional center. Problems repeatedly mentioned were lack of planning time and shortage of teaching materials, yet by year’s-end there were no clear indications that either problem could/would be solved for next year. There were no aides, but many student teachers. Support staff was available, including a reading teacher, the IMC director, and special subject teachers.

This school seemed to call on other resources less than many, probably because it had done so the previous year. As a whole, staff felt quite confident. They used an implementation guide for more than reference. Impacts noted were improved student behavior, the principal’s use of MUSE/IPM factors in recruiting and evaluating teachers, and a highly organized educational program as compared to 1969-70 and earlier (for both staff and students). MUSE and IPM appeared to be developed to about the same degree; that is, both were implemented quite well. With a few problems to iron out, it appeared

that Birch Lake could proceed fairly independently into the phase of institutionalization, given that the staff was dedicated and that the principal had a clear vision in directing the implementation.

Of the eight “implementation criteria,” the situation at the end of 1972 was: (1) Birch Lake had an active IIC; (2) Birch Lake had differentiated staff functions to a large degree; (3) Birch Lake was fully unitized; (4) the level of cooperation among unit teachers as a team was somewhat high; (5) the level of commitment by teachers was high; (6) students were multi-aged to a large degree; (7) IPM was followed to a large degree in WDRSD, progressing in math, and being extended into social studies and science; and (8) the level of open communications within the school was somewhat high (Ironsides, 1972, p. 200).

In terms of key factors in the phase of implementation, (1) the level of utilizing external resources available for inservice was mild; (2) the principal, unit leaders, and unit teachers shared changed role relationships and expectations; (3) the principal turned his authority over to a large degree to the units, while unit teachers did less so; and (4) the level of school district support was high at Birch Lake.

In sum, Birch Lake Elementary School received “broad-based support” in the mobilization phase and was successful in the initiation and implementation of MUSE/IPM in 1971-73, despite some unsolved problems. At Birch Lake, “mutual adaptation” between the reform (MUSE/IPM) and the school occurred during this phase of implementation. Changes in the school were manifested in the IIC, differentiated staffing, unitization, multi-aging, teamwork in the units, shared decision making, and communications, while they adapted the IGE model to local setting in the area of IPM. In comparison, Birch Lake followed the IGE model much more closely while adapting the IGE program to its local setting far less than Nelson Elementary did. It turned out that most of the schools like Birch Lake in the group of 1971-73 nationwide installation continued the practices of MUSE/IPM and remained as true MUSE/IPM schools by the late 1970s.

Chapter 6

Changeover to IGE: The National Picture of MUSE/IPM Implementation, 1971-73

Case studies of Union Elementary, Wilkens Elementary, Juchem Elementary, and Birch Lake Elementary Schools have established that different types of “cooptation” and “mutual adaptation” occurred during the phase of implementation. Thus, the extent to which the components of MUSE/IPM were implemented in these four schools was not as high as the federal agency, the Wisconsin R&D Center, state education agencies, and school districts had sought. How typical were these instances of what was happening elsewhere in the nation? This chapter describes the extent to which the components of MUSE/IPM – the *contents* of IGE change – were implemented in ten states between 1971 and 1973, centering on the following components of MUSE/IPM: the principal and the Instructional Improvement Committee, shared decision-making, MUSE and I&R organization, team teaching, differentiated staffing, staff development, student grouping, IGE subject areas, and the Instructional Programming Model. Then this description of the contents of IGE change will be followed by exploration of key *process* factors of IGE change in implementation phase.

As part of a process evaluation of the nationwide installation of MUSE/IPM, Ironside (1972; 1973) gathered data on the status of MUSE/IPM implementation at the school building levels (see also Chapter 4). The description found in this chapter is based on a total of 205 principals’ responses and a total of 52 IICs’ responses obtained by Ironside (1972) as the initial evaluation of nationwide installation of MUSE/IPM, responses from a total of 98 schools that participated in Ironside’s (1973) follow-up study, and findings of site visits to 25 schools. In general, IIC’s were quite conspicuously easy to set up and schedule meetings for, although this was not so much the case for concrete management of the instructional program; and the adoption of an IGE subject was a comparatively mild task, though the same could not be said for implementation of the instructional programming model per se (Ironside, 1973, pp. 22-23). This chapter starts with the extent to which the IIC was established and functioned as described in the prototypic multi-unit model, followed by the extent to which the school personnel shared decision making on 16 topics. Then, it describes multi-unit and multi-age organization,

I&R unit organization and activities, IGE subject-areas and implementation of IPM, and categorization of IGE schools. This chapter will be concluded by key process factors in implementation phase.

The Instructional Improvement Committee (IIC): Its Establishment and Functions

Of 205 principals who responded to the school questionnaire, 94% (N=193) reported that the school had an IIC (Ironside, 1972, p. 48). A total of 92 schools (45%) had agendas for each IIC meeting and retained a log or set of minutes; 68 schools (33%) prepared an agenda but kept no official record of the considerations or decisions made; 8 schools (4%) kept a log but no official agenda; finally, 24 principals (12%) reported having neither agendas nor minutes (Ironside, 1972, p. 49). In the administration of a separate IIC questionnaire to which a total of 52 responses was obtained, it was found that, at year's end, IIC regular meetings varied from one half hour (four schools) to more than three hours (two schools) per week, and one did not have regular meetings. The great majority had weekly official meetings of one to one and a half hours (Ironside, 1972, p. 131).

As to broad activities IICs had engaged in through the year, the majority took on the six functions, with the areas of parent-contact and school-wide inservice being dealt with by the smallest numbers as shown below in Table 6.1. All schools except one pointed out monitoring IGE implementation as one of its functions, and the majority of IIC's performed a broad range of functions to some degree (Ironside, 1972, p. 132). However, great divergence was found in regard to percentages of time used. Three of 52

Table 6.1
The Extent of Fulfillment of IIC Functions by School (N=52)

IIC Functions	N	%
Monitor IGE implementation and evaluate progress	51	98
Deal with, explain to, get support of parents	41	79
Aid units re IGE subject, materials, records	45	87
Plan and arrange schoolwide inservice training	43	83
Manage school and deal with personnel relations	48	92
Plan for MUSE/IGE operations in 1972-73	48	92

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (p. 132), by R. A. Ironside, 1972, Princeton, NJ: Educational Testing Service.

IIC's reported uniform time distribution, and another 14 had given approximately even amounts to the six functions. The remaining 35 IIC's emphasized one function over others (anywhere from 40% to 75% of reported IIC time) as outlined below in Table 6.2. About one-third stressed "general school management and personnel relations," whereas only one-seventh focused on monitoring IGE implementation. The percentage entries for two IIC functions were quite small: (a) an average of 18% of the time was spent on monitoring IGE implementation, ranging from 0% to 70% across all schools; and (b) planning and arranging schoolwide inservice was dealt with by an average of only 8% of IIC time, ranging from 0% to 50% (Ironside, 1972, p. 132-133).

Table 6.2
IIC Functions and Percentages of Time Used

Function	Number of IIC's Reporting 40-75% Time
Monitor IGE implementation, evaluate	7
Aid units re IGE subject, materials	8
Plan and arrange school inservice	1
Manage school; personnel relations	16
Plan for 1972-73 MUSE/IGE operations	3

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (p. 132), by R. A. Ironside, 1972, Princeton, NJ: Educational Testing Service.

Site visits, arranged as a way of validating information obtained from questionnaire responses, elucidated questionnaire data on the activeness of the IIC in two or three cases based on interviews and observations. According to these visits, the IIC seldom met or dealt with only perfunctory affairs, results contrary to the image gained from questionnaire answers (Ironside, 1972, p. 215).

IIC functions in a total of 74 schools in 9 states (Nebraska and California schools were excluded) as of December 1972 were investigated by Ironside (1973) as part of a follow-up study on nationwide installation of MUSE/IPM. According to the 74 completed responses to the IIC instrument in the follow-up study, for any of the six IIC functions, the number of schools reporting engagement varied from 62% to 100%, although the large majority of IIC's notified certain attention paid to all areas as shown in Table 6.3. Across the three populations (54 schools that had installed in September 1971 and in January 1972; eight schools that had installed in April, 1972; and 12 schools that indicated plans to install September 1972), the area given most attention was "planning

Table 6.3
Number of IIC's Reporting Any Proportion of Time Spent on Specific IIC Functions

Response Category	9-71 + 1-92	4-72	9-72
	(N=54) N %	(N=8) N %	(N=12) N %
Monitor IGE implementation & evaluate progress	52—96	5—62	10—83
Deal with, explain to, parents	45—83	6—75	10—83
Aid units (IGE, materials, records)	49—91	6—75	10—83
Plan, arrange schoolwide inservice training	41—76	6—75	9—75
Manage school, and personnel relations	50—92	8—100	10—83
Plan for 1972-73 and 1973-74 operations	51—94	8—100	11—92

Source: from A Supplement to The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools. (Appendix C), by R. A. Ironside, 1973, Princeton, NJ: Educational Testing Service.

for 1972-73 and 1973-74 operations” (average of 96% of IIC's); the area attended to by the smallest number of schools was “planning and arranging schoolwide inservice training” (average of 75% of the IIC's) (Ironside, 1973, p. 17).

Great disparity was observed in regards to time proportions devoted to these diverse functions. A number of IICs devoted a mere five percent (5%) of their time to many of the functions. Some 47 of the 74 IIC's stressed one area over the others, occasionally indicating as much as 80% of their time on one topic. Table 6.4 shows the number of schools that indicated from 40% to 80% of IIC time on a given function (Ironside, 1973, p. 17).

Table 6.4
Number of Schools Spending 40% - 80% of IIC Time on IIC Functions

IIC Functions	9-71+1-92	4-72	9-72
Monitor IGE implementation; evaluate	4	0	3
Deal with, explain to, parents	1	0	0
Aid units re IGE subject, materials	10	1	2
Plan, arrange schoolwide inservice	0	0	1
Manage school, & personnel relations	16	3	1
Plan for 1972-73 and 1973-74 operations	4	1	0

Source: from A Supplement to The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools. (p. 17), by R. A. Ironside, 1973, Princeton, NJ: Educational Testing Service.

Table 6.5 describes several features of IIC meetings (Ironside, 1973, p. 18). The great majority of IIC's reported meeting on a periodic basis, for at least one hour per week. In most instances these gatherings were scheduled at a specific time, although this

Table 6.5
Characteristics of the IIC Meeting

Response Category		9-71 + 1-92 (N=54) N %	4-72 (N=8) N %	9-72 (N=12) N %
IIC regularly meets	Indefinite	2—4	1—12	1—8
	1/2 hour	4—7		1—8
	1	19—35	4—50	6—50
	1-1/2	13—24	1—12	1—8
	2	10—18	2—25	2—17
	2-1/2	4—7		
	3-4	1—2		1—8
Regularly scheduled at given time?	Yes	49—92	7—88	7—58
	No	4—7	1—12	5—42
Agenda regularly prepared?	Yes	45—83	7—88	7—58
	No	9—17	1—12	4—33
If Yes, agenda distributed in advance	Yes	26--	6--	6--
	No	19--	1--	2--
Formal log, minutes kept?	Yes	35—65	6—75	6—50
	No	18—33	2—25	6—50
Minutes generally distributed after meetings?	Yes	37—69	5—62	4—33
	No	17—31	3—38	8—67
Non-IIC members sometimes requested to attend?	Yes	47—87	7—88	10—83
	No	7—13	1—12	2—17

Source: from A Supplement to The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools. (Appendix C), by R. A. Ironside, 1973, Princeton, NJ: Educational Testing Service.

was incomprehensibly not the pattern for the 9-72 group. About 80% of all IIC's typically had agendas for the meetings, although several did not distribute agendas in advance. However, maintaining minutes or a log was much less prevalent across all three groups; an average of 63% of the IIC's kept such records. In the majority of schools, minutes were typically distributed after meetings and non-IIC members were occasionally invited to attend meetings (Ironside, 1973, p. 18).

Overall, IIC's seemed to be active groups, holding periodically scheduled meetings, preparing agendas, and dealing with a broad scope of matters (as illustrated in Table 6.1 and 6.3). However, some IIC's appeared less vital due to irregular meetings, failure to maintain an official record of decisions and actions, lack of a prepared agenda, and emphasis on one or two responsibilities over others. Strictly—and in addition to the 12 schools during 1971-72 and three schools during 1972-1973 without IIC's—a total of 24 of 205 schools during 1971-72 and eleven of 74 schools during 1972-73 were reported

to have neither topics nor logs; and one of 52 during 1971-72 and five of 74 during 1972-73 had neither topics, logs, nor periodically scheduled meetings (Ironside, 1973, pp. 17-18). In short, the degree to which the IIC was established was high (more than 90%) while the degree to which the IIC functioned successfully fell short of the standards as described in the prototypic multi-unit model.

IIC Effectiveness and the IIC Chairman's Leadership Behaviors

Smith (1972), in a study of nine Colorado IGE schools and 22 Wisconsin IGE schools where principals had occupied the chairman's position since September, 1970, found that the more an IIC chairman was perceived to exhibit a primary concern for the comfort, well being, status, and contribution of the IIC members, the more effective the IIC (p. 91). Here, Smith defined effectiveness in terms of "adaptiveness" (or flexibility: the adoption of new procedures and practices that were uniquely needed for the school), production (the number of plans, procedures, and services the IIC has provided for the school), "efficiency" (the amount of production relative to the time devoted to IIC meetings), and "job satisfaction" (the satisfaction, or morale, of IIC members) (p. 43). In addition, Smith found significant multiple relationships between IIC effectiveness and the interrelationship of

- (1) an IIC chairman considering the comfort, well being, status, and contribution of the other IIC members, (2) the IIC that spends longer time on meeting together each month, (3) the IIC whose members have a propensity for high interaction with others, (4) the IIC whose members have a propensity for close personal relations both toward other members and from them toward self, (5) the IIC consisting of fewer members, and (6) the IIC whose chairman does not dominate or control the other IIC members. (Smith, 1972, p. 94)

Further, tests of the assumed correlations revealed IIC effectiveness to be significantly related to an IIC's involvement in its prescribed tasks. The effectiveness of an IIC was found not to be related, significantly, to IIC member attendance at R&D Center supported workshops, the IIC chairman's administrative experience, or the amount of time the IIC spent meeting together each month when the variable was considered separately (Smith, 1972).

Sharing Decision Making Among the School Personnel

Table 6.6 reports individuals and groups involved in 16 decision areas, for which respondents marked principal, IIC, unit leader, unit, “other” – or any mixture of these. In no case did the number of principals exceed 42 (of 52 principals), and except for one case (i.e., makeup of unit teaching staff), all decisions involved 33 principals at the most (or 63%) (Ironside, 1972). Principals were highly involved in decisions concerning “a) selection of aides, b) communications with parents, c) school-wide inservice, d) staff training away from school, and e) even selection of materials for the IMC” (p. 136); but

Table 6.6
Persons and Groups Involved in Decision-Making

16 Topics	P	IIC	UL	Unit	Other
Choice of IGE subject is made by...	13	15	2	21	Staff-12; District-4
Whether or not all teachers will teach the IGE subject(s) to some extent is decided by...	12	10	4	33	Staff-5; District-1
Decisions as to what subjects each teacher will teach are made by...	6	4	6	47	
Makeup of unit teaching staff is decided by	42	8	9	12	Staff-5; District-1
Unit instructional schedules are set by...	8	9	13	41	
Selection of paid aides is made by...	30	6	6	13	District-8
Aides' duties & roles are determined by...	12	14	16	37	Staff-5; District-1
Selection of materials for IMC is made by...	22	12	9	31	IMC-12; Staff-2
Where and when students may study or work outside actual unit room(s) is set by...	3	14	4	42	
Content & agendas of unit meetings are set by..	12	11	47	32	
Regular communication with parents (contact, information, feedback) is decided by...	30	20	16	29	District-7
Content & frequency of school-wide in-service training is decided by...	30	32	6	10	District-10
Staff attendance at in-service & other activities away from the school is decided by...	33	21	7	10	District-9
Content & frequency of in-service training within the unit is decided by...	7	10	20	29	
Forms or systems for recording student progress and needs are determined by...	8	26	5	38	District-10
Means and frequency of reporting pupil progress to parents are decided by...	10	19	5	19	District-29

Source: from A Supplement to The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (Appendix C), by R. A. Ironside, 1973, Princeton, NJ: Educational Testing Service.

very few principals were involved in decisions regarding “a) unit inservice, b) record forms, c) unit schedules, d) students’ use of extra-classroom space, and e) even what

subjects given teachers would teach” (p. 136). In this latter cluster of decisions, the units played a primary role (Ironsides, 1972, p. 136).

In contrast, only one decision involved a high percentage of unit leaders (deciding agendas of unit meetings, in 47 schools, or 90%); but even in this area, units were involved in 32 schools (or 62%). Evidently, unit leaders generally made few unilateral decisions, but rather acted in cooperation with the unit staffs. The IIC, itself, did not appear to partake in many important decisions; in the three areas where more than 40% of IIC’s participated, either the principal or the units were also involved. Apparently, IIC “decisions” often meant referring the matter to the units for resolution (Ironsides, 1972, p. 136).

These data suggest that decision-making was extended beyond the school office, by and large, and that it most often came to reside at the unit level – although a few decisions were left up to unit leaders or the IIC. (Note: District influence was felt in several areas, notably hiring, communications with public and parents, and inservice training, areas where District policy had no doubt been in effect for a long time.) (Ironsides, 1972, p. 137)

Loose (1972) conducted a study of 30 IGE schools in Eastern Wisconsin between October, 1971 and May, 1972. Schools starting multi-unit operation in Fall, 1971 were classified as first-year schools (N=9), those beginning in Fall, 1970 were identified as second-year schools (N=14), and those operating before that time were combined in a category of third-year schools (N=7) (Loose, 1972, p. 79). According to this study, decisions about communication or communicating district policy were the most frequent in the first- and second-year schools, while teacher personnel and aide decisions were the most frequent for the third-year schools. After these two decision categories, the largest percentage of total decisions involved curriculum, scheduling and timing. Pupil personnel and materials decisions ranked third and fourth, respectively. Decisions concerning school philosophy and goals were just ahead of evaluation, to which the smallest percentage of the total decisions were related (Loose, 1972, pp. 82-83). Based on the Loose questionnaire data, the predominant decision-making style was unilateral (see footnote 5 in Chapter 1) for situation subscales “Outside Requests” (63%), “Parents and Community” (56%), and “Inservice” (48%); in contrast, subscales “Curriculum

Selection” and “IGE Programming” showed fairly even distribution among the unilateral, consensual, and delegating styles (Loose, 1972, p. 85).

When questionnaire responses and observations were compared by Loose, however, higher percentages emerged for the unilateral style based on observations than on the questionnaire perceptions concerning each of the five decision subscales. Observational data showed that over 60 percent of the decisions during each of the three years were made by the principals, while consensus decisions accounted for less than 10 percent of cases for each year with regard to each of the five situation subscales. Delegated decisions made by individual IIC members, other than the principal, did not exceed 31 percent of the total involvement for any of the three years (Loose, 1972, p. 84). In half of the situations, the principal perceived the decision-making style to be more participatory than the teachers or unit leaders perceived it to be. The number of years of IIC operation did not significantly affect the number or kind of decisions made, the amount of member involvement, or the style of decision making (Loose, 1972, p. 91). In short, the principal remained the major decision maker on the five situation subscales and most of his/her decisions were made unilaterally, rather than shared with IIC members, in these 30 Wisconsin IGE schools.

Nerlinger (1975) studied a sample of 188 individuals from 48 units in IGE schools in 12 states that implemented MUSE/IPM no earlier than the fall 1971 and no later than the fall 1972 to examine the relationships of the IIC’s involvement in decision making, the representation of teachers on the IIC, and the effectiveness of the I&R unit in MSUE/IPM schools. Nerlinger (1975) reached the following conclusions: (1) Extent of involvement in decision making by the IIC was significantly related to effectiveness of the I&R unit; (2) Representation for teachers provided by the unit leader serving on the IIC was significantly related to the effectiveness of the I&R unit; (3) Extent of involvement in decision making and representation together were significantly related to effectiveness of the I&R unit; (4) Extent of involvement in decision making and representation, the two independent variables, were closely related constructs; (5) Teachers perceived themselves to be more fully represented than involved in the decision-making process; (6) Extent of involvement in decision making by the IIC schools was perceived by unit leaders and teachers as beyond the stage of providing

information – toward the level of developing possible alternatives; and (7) Representation for teachers are provided by the unit leader serving on the IIC was perceived as moderate by respondents in this study (Nerlinger, 1975, pp. xiv-xv).

According to Ironside (1972), from 80 (10%) to 189 (24%) of 776 teachers omitted responses (respondents were asked to omit activities which did not apply to their IIC's) to a question concerned with how well the IIC carried out various tasks. Topics were drawn from implementation suggestions and thus were posed as desirable functions, but the number of "omits" itself suggests that some IIC's had not yet taken on certain of these functions. Moreover, as a group, respondents were ambivalent in their ratings: in no case did a rating (poorly, adequately, well) draw over 50% of the total. The "adequate" rating consistently received the largest response percentages; highest percentages in the "poorly" and "well" categories were between 20% and 25% (Ironside, 1972, p. 126).

The two functions perceived most frequently as being well-done by the IIC in the Ironside study were "improving staff communications" and "taking the place of the traditional teachers' meeting." The two tasks apparently done least well were "locating needed instructional materials" and "coordinating contacts with parents." Overall, about 20% of respondents indicated that each of the 8 listed tasks was done poorly. The function most frequently (24%) done poorly was "coordinating the instructional program." With respect to "improving overall school communication," "coordinating use of space and materials," and "taking the place of the teachers' meeting," 15% more unit leaders rated these well-done than did staff teachers. At the same time, there were still from 10% to 14% of unit leaders who rated these as poorly-done. Overall, all eight tasks listed were perceived by 75% or more of the respondents as being done either adequately or well (Ironside, 1972, pp. 126-127).

In sum, this collection of data suggests that although IGE schools were moving toward decentralization of authority by the end of the 1971-72 school year, the principal was still the major decision maker in most of the managerial and curricular domains, and a unilateral decision-making style was predominant over consensual or delegating styles. Thus, the IGE goal of sharing decision making was only moderately achieved, falling far short of the standards that the designers of the prototypic multi-unit model set forth.

Multi-unit and Multi-age Organization

Of those 205 principals who responded to Ironside's school survey questionnaire, 99% (N=203) reported having children organized into units. A total of 661 units were reported across all states, and 580 (89%) of these were noted as multi-aged. There were considerable variations in ratios across states, however, ranging from 64% to 100% multiaging. Only 6 schools had no multi-age units (Ironside, 1972, p. 50). Some 56% of respondents had fully unitized schools, ranging from as low as 36% in one state to the 79% level in another. On a separate questionnaire, 88% of 52 IIC's responded that units were multi-aged, and 81% said that instruction itself was regularly directed to multi-age groups. (Note: As site visits revealed, multi-aged instruction, here, referred only to the specific IGE subject(s) and not to regular instruction in all curriculum areas) (Ironside, 1972, pp. 138-139).

Concerning "disparities" from full unitization, 22% of the schools (N=45) had the kindergarten separate from the primary unit(s) as shown in Table 6.7. Several other reasons were also supplied, with more than one reason often being provided. The first two reasons, together, explain at least half of the schools not fully unitized, leaving about 40 schools covered by other reasons. In many schools whole grades were not unitized, or only certain classrooms were unitized, while some departmentalization was also noted (Ironside, 1972, pp. 50-51).

Although numerous schools reported in the school survey questionnaire that multiaging was the rule in their units, site visits found that this meant "either (a)

Table 6.7
Reasons for Disparities from Full Unitization

Reason	Percentage of Schools (%)
Kindergarten separate	22
Special Education, EMR, TMR, and emotionally disturbed: Separate from the regular units	8
1 or 2 grades self-contained	6
3 or 4 grades self-contained	6
1 or 2 rooms self-contained	2
Grades 5-8 (or some combination) departmentalized	6
Only 1 unit in the school	4
Only 2 units in the school	2

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (p. 51), by R. A. Ironside, 1972, Princeton, NJ: Educational Testing Service.

multiaging of units existed on paper, or (b) multi-aged instruction was restricted to the IGE subject-area” (Ironside, 1972, p. 214). As to the degree of unitization, while many schools had claimed full unitization, interviews and observation disclosed that kindergartens were not involved, that all special education children were not unitized, or that one grade level was not included. These disparities appeared to be related to a matter of definition and interpretation of the terms used in the survey instrument, leading a number of the visited schools where variations existed not to report this in their surveys (Ironside, 1972, p. 215).

One item in the school survey questionnaire asked about “unusual units, special in some way but which functioned as units.” Of 36 principals (18%) with such units, half indicated that a “special subject unit” had been organized to manage the teaching of art, music, or physical education, but in these cases “unit” was considered a collection of teachers, not a collection of students. Ten schools pointed out that special education children were included in “regular” units (often called “mainstreaming”), while in five schools, special education children were themselves organized into a working unit (Ironside, 1972, p. 51).

Ironside’s (1973) follow-up study revealed that an average of 70% of schools were fully unitized as shown in Table 6.8. The most dominant exception to full unitization was a detached kindergarten program (N=8), although in a few schools varied composites of grades one through eight were not yet organized into units (N=11). Further, four schools in the 9-71 population which had only one unit in 1971-72, persisted at midyear with that same unit despite their large student bodies (Ironside, 1973, p. 20).

Table 6.8 further summarizes the number of schools in which all units seemed to be multi-aged; in all three implementation period populations, an average of 80% of schools were so categorized. In the rest of schools a combination of multi-aged and grade-level units, or simply grade-level units existed. More important, when it came to instruction itself, frequently that was done on a grade-level basis, even in multi-aged units. This was the case for both the official IGE subject(s) and other instructional areas. It can be inferred, therefore, that while the vast majority of units were multi-aged as an organizational pattern, subsequent instruction was much less typically addressed to multi-

Table 6.8
Unit Organization and Characteristics

Response Category		9-71+1-72(N=54)	4-72(N=8)	9-72(N=12)
		N %	N %	N %
Do the units include all students in the school?	Yes	37—68	7—88	8—67
	No	16—30	1—12	4—33
Does any unit NOT have an IGE subject-area?	Yes	7—13	2—25	1—8
	No	46—85	6—75	11—92
Number of units in school which appear to be multi-aged (None = grade level units)	All	42—78	8—100	9—75
	Some	9—17		1—8
	None	3—6		2—17
Is instruction for IGE subject(s) multi-aged? (Some = in some units)	Yes	39—72	6—75	9—75
	No	3—6	2—25	2—17
	Some	12—22		1—8
Is other regular instruction multi-aged?	Yes	27—50	4—50	2—17
	No	15—28	2—25	8—67
	Some	12—22	2—25	2—17
How many formalized IGE subjects, typically in the whole school?	1	14—26	3—38	11—92
	1-2	6—11	1—12	
	2	17—31	2—25	
	2-3	4—7	1—12	
	3	3—6		1—8
	3-4	4—7		
4 +	6—11	1—12		

*In three schools, Special Ed-EMR is a unit; in five, kindergarten is organized as a unit.

Number of weekly unit meeting hours	Indefinite			
	1			1—8
	2			5—42
	3			3—25
	4+			3—25
Unit meeting agenda typically prepared?	Yes			6—50
	No			6—50
Unit meetings sometimes for inservice in the unit?	Yes	40—74	7—88	8—67
	No	13—24	1—12	4—33
Do all unit teachers teach the IGE subject(s)?	Yes	46—85	8—100	11—92
	No	8—14		1—8
Periodic assessment done by Formal test techniques?	Yes	43—79	5—62	9—75
	No	4—7	3—38	3—25
	Some	6—11		

Source: from A Supplement to The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (Appendix C), by R. A. Ironside, 1973, Princeton, NJ: Educational Testing Service.

aged groups of children. This seemed true across all three groups, with some discrepancy where conceivably instruction was multi-aged for one IGE subject but not for another. It

appeared significant to highlight the fact of far-reaching instruction to non-multi-aged groups, notably taking into account the number of schools who notified two, three, and four formalized IGE subjects at midyear (Ironsides, 1973, pp. 20-21; See also Klenke, 1975).

Further, while responding to a detailed questionnaire by Ironsides (1972), close to half (46%) of 776 teachers reported teaching various multi-aged groups in the unit as their characteristic mode, and the remainder reported as follows: 26% teaching various single-age single-grade groups in the unit; 12% teaching a particular (self-contained) multi-aged group; 8% teaching a self-contained single-age group. The most frequent mode, therefore, was the one closest to the MUSE/IGE specifications. (Note: The question was not asked in terms of only the IGE subjects(s); the evaluators trusted that the data in fact did report the characteristic modes through the school day and all subject-areas.) A total of 53 teachers indicated other modes, most frequently a combination of multi-age and single-age groups. As for teacher-unit leader differences, percentage variations never exceeded six percent (Ironsides, 1972, p. 127).

In sum, taking the verification by site visits and teacher responses into consideration, about half of 205 schools were fully unitized, less than 70% of established units were multi-aged, and about half of established units provided instruction directed to multi-age groups. In addition, the variations in full unitization and multi-aged instruction show not only that the prototypic model of multi-unit organization was not implemented to the high degree that the R&D Center expected, but also that a number of IGE schools coopted the program or adapted the prototypic model of multi-unit organization to local circumstances.

I&R Unit Organization and Activities

A total of 208 I&R units representing 59 schools reported the diverse ways in which the IIC had been supportive in the instructional domain during their first operational year. Of six options (assistance in hammering out scheduling problems, consultants, records systems, behavioral objectives, instructional plans, criterion-referenced tests), by far the most commonly checked (by 58% of the units) was assistance in hammering out scheduling problems. Other response areas included “consultants,

records systems, behavioral objectives, instructional plans, and, least often, criterion-referenced tests” (Ironside, 1972, p. 130). Given that these were areas where the IIC was designed to guide and support, it appeared that either units did not appeal to the IIC or the IIC’s were not yet ready to render such assistance (Ironside, 1972, p. 130).

One of Ironside’s detailed questionnaires was directed at each unit regarding its meetings, inservice, and instructional procedures. Here, 208 units representing 59 schools provided complete returns. As detailed in Table 6.9 below, the large majority of units reported that they had a prepared agenda, but a comparable majority did not retain minutes of these meetings. A majority (57%) also responded that aides and student teachers did not periodically attend the unit meetings (fewer than half included aides/student teachers in the meetings), although some attested to infrequent attendance (via footnotes).

Table 6.9
Characteristics of Unit Meetings

Unit Activities	YES		NO	
	N	%	N	%
Almost always have a prepared agenda?	146	70	58	28
Minutes recorded and distributed to staff?	51	25	154	74
Aides (& student teachers) regularly attend?	86	43	117	57
Does principal attend unit meetings at times?	177	85	27	13

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (p. 132), by R. A. Ironside, 1972, Princeton, NJ: Educational Testing Service.

Regarding the principal’s attendance, about equal proportions (38%) noted “rare”(N=80) and “occasional” (N=79) attendance, while only three (1%) reported “always.” In a few cases it was “often” (N=15, 7%) and in a greater number it was “never” (N=27, 13%) (Ironside, 1972, pp. 129-130).

Concerning unit planning time, the great majority (N=195 or 90%) of principals reported that they normally had school-day planning time – anywhere from one half to five or more hours per week. Two hours per week was the most frequent response (N=50, or 24%), though in 70% of the schools planning time ranged from one to three hours. Only seven schools (3%) reported that they had no school-day planning time (Ironside, 1972, p. 52; Table P-27 in Appendix B-13). The picture was different,

however, when it came to unit leaders' planning time. Some 98 (49%) unit leaders had their own separate planning time (during school hours) ranging from one half to five or more hours per week, whereas 47% of unit leaders had none (Ironsides, 1972, p. 52; Table P-26 in Appendix B-13).

Teamwork

Teamwork was a "problem-area" for teachers. Teamwork and unit communication (working, planning, teaching together) comprised a major concern expressed by teachers, and at the same time it was an area frequently indicated as being the most rewarding. What staffs generally did accomplish, and appreciate, was teamwork. A great many units consistently reported the benefits of working together and learning from one another. There was some grumbling about teammates and unit leaders, but again, on the whole the attitude was positive toward the concepts and realities of unit structure. This was more frequently evidenced in planning, sharing and deciding together than in teaching together; as noted, even in units with "good feeling," much instruction was carried on in self-contained classrooms and with self-contained attitudes (Ironsides, 1972, p. 212).

Many principals, too, noted unit teamwork as a valued goal pursued and accomplished in the first year. The irony, however, is that at the end of the year 1971-72, 50% of the some 700 teachers polled indicated their preference for "doing things as a unit" only half the time or less. Despite satisfactions, teamwork apparently had only a part-time appeal (Ironsides, 1972, p. 232).

Formal Inservice Training for the Whole School Staff

The project's overall training design called for at least one-half day of inservice in the fall and the same in the spring, after the formal training chain itself had culminated in the Preschool Workshop. Of 189 respondents (16 principals omitted), 147 (79%) schools indicated that they held inservice sessions while 42 (21%) principals reported no inservice activities for the entire staff. The most frequent amount was 6-10 hours reported by 21% of the schools. Some 27 (13%) schools held 1-5 hours of inservice while 18 (9%) schools apparently held 11-15 hours of inservice (Ironsides, 1972, p. 75, Table P-78 in

Appendix B-36).

The most frequent planner of these sessions was the IIC (92 schools, or 45%), followed by the principal alone (15%), the total staff (7%), and the school and district together (5%). In a handful of cases, unit leaders, district personnel, and consultants planned the inservice programs (Ironside, 1972, p. 75). Outside persons or groups who assumed active roles in planning or conducting these inservice sessions included state and local coordinators, personnel from other MUSE/IPM schools, various consultants, and personnel from the R&D Center and /I/D/E/A/. This collection of outside support was represented in all but two of the states, suggesting a wide range of personnel resources which schools had called upon and could continue to call upon (Ironside, 1972, p. 76). Table 6.10 outlines the inservice topics and the frequency with which each of them was covered by the 150 schools. These topics are presented in descending order of frequency based on the entries for the total group as an index (Ironside, 1972, p. 75). The number of schools that studied these topics ranged from 87 (42%) to 20 (10%) (Ironside, 1972, p. 76; P-82 in Appendix B-38).

Table 6.10
Frequency With Which Inservice Topics Were Covered (N=150)

Topic	Number of Schools (% of Total Group)
Reading	87 (42%)
Grouping children	70 (34%)
Behavioral objectives	69 (34%)
Reporting procedures (to parents)	58 (28%)
Unit functions	51 (25%)
Diagnosis and assessment	50 (24%)
Development of materials	47 (23%)
Pupil learning modes	45 (22%)
Mathematics	39 (19%)
Train aides, paraprofessionals	38 (18%)
Evaluation of MUSE/IPM progress	36 (18%)
IGE record-keeping	35 (17%)
Subject areas other than reading and mathematics	20 (10%)

Source: from The 1971-72 Nationwide Installation of the Multiunit/IGE Model for Elementary Schools (p. 76; p. 40, P-82 in Appendix B), by R. A. Ironside, 1972, Princeton, NJ: Educational Testing Service.

Concerning inservice, a number of schools evidently did not have the whole school staff present for inservice. Using “whole staff present 80% or more of the time” as

a criterion, some 117 schools (57%) had inservice for the school staff as a whole. In addition, 47 schools (23%) listed six different inservice approaches: (1) inservice being held only within units (nine principals, or 4%); (2) inservice within units and a little for the entire staff (five schools or 2%); (3) the general faculty meeting being regarded as the locus of inservice session (four or 2%); (4) inservice being accomplished at IIC meetings and faculty meetings (two schools); (5) a miscellaneous approach (eight or 4%); and (6) inservice training consisting of all teaching and all meetings and occasional discussions in the hallway (19 principals, or 9%) (Ironside, 1972, pp. 77-78; Table P-85 in Appendix B).

According to responses to the IIC questionnaire, one of several detailed questionnaires, by year's end all 52 schools reported that they had schoolwide inservice sessions during the year, and 75% pointed out regular schoolwide inservice. Scheduled time ranged from fewer than five hours to more than 21, with 22 schools, or 42%, having over 21 hours. Two groups – unit leaders and staff teachers – were usually present at inservice training in all schools, and 49 of the 52 principals typically attended. Aides were involved in 23 schools, the librarian/IMC director participated in most of the sessions in 31 schools, and in 21 schools interns and student teachers were included. Considering that a few schools did not have these latter three groups of personnel, it appears that in close to half the schools inservice was neither planned for nor obligatory for these persons (Ironside, 1972, pp. 134-135, 139).

While many of the visited schools reported generous schoolwide inservice hours on diverse topics, several interviews during site visits revealed that the reported times included faculty meetings or inservice for only a fraction of the staff – or what would better be categorized as “general discussion.” In these schools, inservice was a word that took on several meanings and a matter of definition was involved (Ironside, 1972, p. 215). When IIC's were asked to what degree the IGE films, filmstrips, and/or booklets were utilized in inservice programs for the staff after initiating MUSE/IGE installation, six schools (12%) indicated “often,” nine schools (17%) “frequently,” 31 schools (60%) “sometimes,” three schools (6%) “rarely,” and three schools (6%) said “never.” Site visits also showed that these resources were used at a minimal level, or handed out without considerable build-up. While many teachers found them valuable, only a small number

considered the films worthy enough to view a second time (Ironside, 1972, p. 213).

Miscellaneous Opportunities for Training and Exposure

Visits to operating MUSE/IPM schools were reported by over 100 schools during spring or fall 1971. Such groups as principals from 112 schools, unit leaders from 100 schools, staff teachers from 85 schools participated side by side with librarians, special subject teachers, reading teachers, and a few counselors and aides (Ironside, 1972, p. 60). League-sponsored general training or meetings attracted principals from 126 schools (62%), even only a few months after implementation was begun. Unit leaders from 99 schools were reported to have attended, as were unit teachers from 55 schools, and a few each in other classifications. Similar to visits to schools, these linkage activities tended to be made typically available to principals and unit leaders, with lesser chance for staff teachers, and far less for other groups (Ironside, 1972, p. 61). Special statewide or regional reading conferences for reading personnel attracted reading teachers from 23 schools in 6 states in addition to principals from 17 schools. Specially arranged staff development training for the school staff drew principals of 37 schools (18%), unit leaders from 37 schools, staff teachers from 26, and personnel in three other classifications (Ironside, 1972, p. 61). Special conferences, at the district level, for general purposes or problem-solving were taken part by 36 principals across all states and attended by others from four schools (Ironside, 1972, p. 62). Other miscellaneous activities were engaged in by any number of the staff from 20 schools (Ironside, 1972, p. 62).

Respondents to the IIC questionnaire pointed out opportunities for training or mutual support which were employed during the year. A number of schools suggested participation in visits to other MUSE/IPM schools (N=40, or 77%), local or regional meetings of two or more staffs (N=34, or 65%), inservice featuring consultant from the State Department of Education (N=32, or 62%), inservice featuring consultant from /I/D/E/A/ or Wisconsin R&D Center (N=27, or 52%), and training activities sponsored by League or PACT (N=46, or 88%) (p. 135). Among the 46 schools reporting linkage-sponsored activities, the large portion of participation was by principals (46 schools or 88%) and unit leaders (43 schools or 83%). Unit teachers from 18 schools (35%)

participated, while aides and librarians from only eight schools (15%) were included (Ironsides, 1972, p. 135).

With respect to unit inservice, 117 units (56%) gave a positive response. Among these 117 units, the large majority suggested their use of IGE training materials, stress on the individualized curriculum, and inquiry of unit operations along with learning/teaching styles. Almost all units claimed that the inservice was helpful and suggested plans to keep them up next year. Of the 91 “No” responders, 37 noted an intent to institute such inservice the following year, and 52 had no such plans (Ironsides, 1972, p. 129). Ironsides’s (1973) follow-up study found that approximately 75% of the units (N=56 of 74) utilized their meeting time for infrequent inservice training (in all three groups) (Ironsides, 1973, Table I-8 in Appendix C).

Inservice Training Across All 10 Schools Visited

Observations of inservice training in ten schools showed that some had no inservice training; others had as many as several days, differing also in the composition of the attendees and sponsorship (Ironsides, 1972, p. 208). Usually more than one topic was dealt with, including the following (with frequency noted):

- teaching styles (flexibility).....1
- classroom management in unit.....1
- planning for IGE in general.....2
- general staff meeting problems.....2
- unit operations; teamwork.....3
- materials for IGE subject-area.....2
- planning for second IGE subject.....2
- practice instructional program model...2
- develop objectives.....3
- general teaching tips.....1

Inservice activities or procedures employed were most typically general discussion, viewing films and filmstrips, formal lecture, study of materials and tests, and small discussion. Brainstorming, panel presentation, and using a quiz as basis of discussion were utilized only twice each. In one instance, a simulation was employed. In another case of working directly on the IGE programming model, participants set up specific objectives (Ironsides, 1972, p. 208).

About half the inservice training events had documented agendas and particular objectives; in only two instances did the plan include assessment of the training event. Apart from the use of IGE films, training sessions usually did not utilize supporting materials such as outlines, A-V equipment, lists, or chalkboards, nor were careful minutes recorded. Further, in three places the training occurred in workspaces that were not facilitating participation, writing, or easy viewing (Ironside, 1972, p. 209).

Regarding attendance, most sessions included the total staff; one session was for aides only; frequently aides and special subject teachers were not included; and in two instances each inservice occurred only within units or for a small group of interested teachers. State coordinators attended four of these events, as were several district personnel and consultants (observing or conducting training) (Ironside, 1972, p. 209).

Products or outcomes were typically very impalpable: attitude change, intentions to develop materials or regroup the children, a list of topics to reflect on later, or (in most instances) nothing appreciable at the time. One unit modified its schedule and set up learning centers as evident results of work with a consultant, one school placed an order of teaching materials, and one attempted to change the IIC organization. The most inspiring outcome was the most impalpable: attitude change on the part of three staff teachers after talking openly about their teaching styles and discerning their formal approach (in association with an IGE filmstrip) (Ironside, 1972, p. 209).

Those sessions observed typically lacked a specific, anticipated product which could be applied, tried, or examined; frequently the purposes and activities were multiple and dispersed (“general”) where an effort to focus on one particular manageable problem might have been more suitable. Listening, rather than participation and working together, was the major activity of attendees (Ironside, 1972, p. 209).

Many teachers and others considered that the inservice training was valuable (and usually approved the use of films and filmstrips), most typically because it came after two or three months of work in time to rejuvenate their perceptions and to visit their recent experiences. It was also observed that there were some splendidly planned events that progressed toward their goals, and that the two unit-level sessions were distinctively fruitful (Ironside, 1972, p. 210).

Visits also revealed that a number of principals indicated in the questionnaire their

participation in national meetings or staff-development training or special workshops which later turned out to be other types of training. There were few cases of this type, but a sufficient number to question earlier responses to the questionnaire (Ironside, 1972, p. 215).

During site visits, it was frequently observed that unit teachers had not participated in as much training as had the school leaders. It was difficult for unit teachers to be released from classroom duties, of course. Usually, opportunities before school opened, training after school began, linkage group activities, and special training were offered for principals, unit leaders, and many reading specialists (Ironside, 1972, p. 213). An analogous finding – although not manifested quite as often – was that several principals did not feel the same as unit leaders with respect to the task of training or guiding unit teachers (Ironside, 1972, p. 213).

Schoolwide inservice, site visit teams concluded, left something to be desired. “If it wasn’t the planning and objectives and materials, it was the lack of full staff participation” (Ironside 1972, p. 211). In contrast, in the few cases in which unit inservice was observed, the outcomes seemed to be more helpful and persisting (Ironside, 1972, p. 211).

With respect to differentiated staffing, 94% of 52 IIC’s indicated contributions being made by aides, while 73% reported that teachers took on different roles within the units (Ironside, 1972, p. 139). Eighteen percent of 205 schools did not normally have aides in their units; this calculation included a few cases where an aide worked with three or four units, and was computed as “none” for reporting’s sake. Some schools reported no aides while others had as many as two or even three in each unit. State disparities were noted in that one state had no aides at all in 6% of its schools while in another state fully 61% of schools reported having no aides. The spring 1972 cohort had far more schools with no aides serving units. Many schools also had interns: 27 schools (14%) reported having between one and five interns in their units (Ironside, 1972, p. 52). Half of the schools reported that they had student teachers; in most instances a school had one per unit, but in some units there were as many as four or five within the early few months of the school year. There were again conspicuous state-by-state disparities: one state had no student-teachers in 15% of the schools, while another state had none in 64% of the

schools (Ironside 1972, p. 52).

In addition, divergence within schools was noticed on several topics, to the degree that the unit appeared to be a quite independent entity (see Pellegrin [1970] on his observation that collaborative relationships were confined fundamentally within the unit in the first multi-unit schools in 1967-68). For example, different units began their official gatherings – in the same school – several months apart in many schools. As to weekly official gatherings, they differed as much as three hours in length in a number of schools. Certain units had meeting agendas while others did not; some retained official minutes and others did not. Within the same schools, one or two units had no aides while other units had them. In schools where all units had aides, some typically included these paraprofessionals in the unit meetings while others did not. Some units held their own inservice training while others down the hall made no such arrangements. Similarly, certain units in a school offered programs for unit parents, while other units had not done this. In addition, as to the principal's attendance at unit meetings, one unit noted periodic participation, another his rare attendance, and another his absolute absence. These disparities – and others related to instructional practices – were the rule, not the exception. These variations defined a prevalent lack of uniformity in the way units operated within as well as across MUSE/IPM schools (Ironside, 1972, p. 131). (Note: These variations help in explaining the reasons why the new patterns were not institutionalized. These variations speak to the adaptations of the innovation at the classroom level and school building level as well as district and state levels.)

Ironside's (1973) follow-up study found that all unit teachers taught the IGE subject(s) in nearly 90% of the units (Ironside, 1973, Table I-8 in Appendix C). While the latter was the intent of the implementation layout, it also mirrored the fact that a number of teachers were functioning in fundamentally self-contained grade-level classrooms, and thus, in fact, taught all subjects, whether IGE or not (Ironside, 1973, p. 21).

In summary, the I&R unit was created: (1) to plan, carry out, and evaluate instructional programs for each student in the unit; (2) to engage in continuous inservice staff development activities; (3) to provide preservice teacher education activities; and (4) to plan and conduct cooperatively, often with other agencies, a systematic program of research and development (Klausmeier et al., 1971, pp. 20-22). In fulfilling these

functions, however, I&R units were not offered enough guidance and support by the IIC's; the large majority of units reported that they had a prepared agenda, but a comparable majority did not retain minutes of these meetings; I&R units had school-day planning time in the majority of schools; the I&R units had varying numbers of aides or student teachers; team teaching was related to not only the benefits of working together and learning from one another, but also interpersonal conflicts and the constraints of unit decisions on individual members or subgroups; and unit teachers participated less in inservice training sessions than the principal and unit leaders. Due to these unexpected obstacles, the degree of unit operations was not as high as the R&D Center had hoped. More important, while the majority of teachers were functioning in fundamentally self-contained grade-level classrooms, unit teachers constructed various hybrids adapted to the unit conditions they faced, the ideas they found congenial, and the demands of supervisors. As Cuban (1993) noted, these hybrids suggest that these unit teachers, "confronting conflicting expectations, invented unique compromises tailored to their settings" (pp. 112-113).

IGE Subject-areas and Varying Implementation of IPM

The subject-areas employed for IGE-ing for the large majority of schools were, in order of most-to-least common: (1) Reading, (2) Mathematics, (3) Language Arts (various aspects), (4) Wisconsin Design for reading skill, (5) Science, and (6) Social Studies. "Reading" is conceivably confusing here, since a number of principals presumably used that term for the Wisconsin Design (which was at that time limited to word-attack instruction) (Ironside, 1972, p. 54).

Regarding the number of IGE subject-areas emphasized, in consecutive order, one, two, three, and four IGE subject areas were notified by 107, 49, 12, and eleven school principals respectively, while eleven other school principals (5%) answered "none." Thus, a total of 156 schools (76%) indicated having one or two IGE subjects while 23 responded having three or four (Ironside, 1972, p. 53).

When teaching (I&R) units were asked about their current IGE subject(s), of 208 units representing 59 schools, 183 (88%) claimed having an IGE subject-area in May, 1972 and 21 units (10%) responded having none. Additionally, 54 units reported a second

IGE subject. For both subjects, a great majority – but not all – of the units carried out some elements of the programming model: “assessing in terms of behavioral objectives, grouping in terms of common needs, regrouping as students progressed, and having all unit teachers teach the IGE subject” (Ironsides, 1972, p.130). The majority of units instructed groups of changing combination and size based on frequent regrouping. In other words, most of the units that were teaching an IGE subject responded that they were involved in the prescribed instructional practices. In contrast, a number of units indicated that they did not teach the IGE subject following all aspects of the model (Ironsides, 1972, p. 130). One exceptional finding was that nine schools (4%) notified using the IGE approach in “all subjects” (Ironsides, 1972, p. 53).

Concerning whether the IGE subject-areas were taught in all of the school’s units, a total of 28 schools (14%) responded that while they had IGE subject(s), they were not practiced in all units; this was larger by 17 schools than the number that noted having no IGE subject-areas at all. Overall, there was a reverse relationship between the number of IGE subjects and the number being practiced in all the school’s units. Many schools indicating three or four subject-areas reported that each unit had a distinct IGE subject. And a few schools admitted having the only one IGE subject being “tried out” in solely one unit (Ironsides, 1972, p. 53-54).

Ironsides’s (1973) follow-up study found that 100% of all cohorts reported having at least one formal IGE subject-area, and roughly 88% of all populations indicated that it was implemented in all the school’s units. On the question of the instructional programming model, however, there was less uniformity; respectively, 74%, 88%, and 77% of IIC’s indicated that the model was followed in all the units with IGE subject(s). However, the elements of this model were mentioned as a problem-area, or a topic for technical assistance; grouping students (N=3), techniques for evaluation and assessment (N=5), record-keeping (N=5), writing objectives (N=3), and developing learning modules (N=3) (Ironsides, 1973, pp. 21-22).

As with the entire matter of implementation at the school level, the IGE programming model was adopted and followed to varying degrees (Ironsides, 1972, p. 225). While some schools relished certain success, many others had certain difficulty with assessment, or grouping, or providing for diverse learning styles (Ironsides, 1972, p.

225). IPM's sequenced steps appeared to be somewhat well known but demanding, and evidently its difficulty lay in the number of radical changes it required from traditional classroom procedure. Teachers by and large embraced and treated IPM conceptually, but faced substantial difficulty in applying it systematically, even when the curriculum utilized was one developed along the lines of the model (Ironside, 1972, p. 231).

Further, a number of schools were discovered to have lacked the resources to embrace a packaged curriculum applicable to IGE programming. Consequently, "they either began to develop their own system (objectives, materials, assessments, etc.)," or they delayed the IPM aspect of the IGE system to the following year, or "they adapted existing programs to one or two aspects of the model" (Ironside, 1972, pp. 15-16). Numerous schools commonly adopted the Wisconsin Design for Reading Skill Development (Word Attack component) as the IGE subject. This was regarded as a prototype and means for carrying out the teaching of the skills and also for exemplifying the related aspects of the IGE instructional model (Ironside, 1972, p. 213). Other schools selected published textbooks in reading (most common), mathematics, and science as well as social studies. However, for a large majority of schools, "IGE programming remained an ideal some distance away from their reality" (Ironside, 1972, pp. 15-16).

Site visits clarified that most visited schools (but not all) began at least to work with one IGE subject, and numerous schools made an effort to go IPM in two or even three subject-areas before realizing that this was more difficult than expected. The pattern was to carry out IGE programming moderately well in one subject during the year (Ironside, 1972, p. 212). In addition, site visits made clear the considerable difficulty in assimilating the instructional programming model in all its related components. Staffs, by and large, did not receive adequate training or background – perhaps "practice" – and very often were uncomfortable with the model and its assumptions (Ironside, 1972, p. 212).

This Instructional Programming Model appeared not to be agreeable to revision. Since the model represented a zenith of numerous efforts in the field to establish a sequenced approach to learning that was both flexible and structured, the model was expected to be pursued to the letter in order to be effective. In order to meet this expectation, a sizable amount of training and practice was required in the 1971-72

schools before the model was implemented to a satisfying degree, work that did not materialize, however (Ironside, 1972, pp. 225-226).

In summary, as with the multi-unit organization (MUSE), IGE's Instructional Programming Model was not implemented to the degree that the developers envisioned. In addition, the variations of its implementation went far beyond the expectations of its developers. Unit teachers simply could not accommodate the enormous number of radical changes from traditional classroom procedure. Confronting diverse conflicting expectations from supervisors, parents and students, however, unit teachers began to develop their own system with respect to objectives, materials, assessments, and so on. In doing so, they created various hybrids by either adapting some aspects of the model to their traditional teaching practices or adapting existing programs to one or two aspects of the model.

Categorization of IGE Schools

Given disparities among personnel involved in the installation effort on conditions of definite participation in the project, when such participation began, and what constituted the initial steps in adopting MUSE/IPM, it was not easy to report how many schools had indeed installed the MUSE/IPM innovations in the 1971-72 school year. Of 287 schools listed on rosters supplied by state and city coordinators, it appeared that at least 33 (or 11%) were inaccurately included; a number of schools had installed up to three years ahead of September 1971; a number of them did not plan to be involved until September 1972; and a small number reported no past or future relationship whatsoever. Relying upon the questionnaire returns and moderate projections concerning the non-responding schools, Ironside (1972) estimated that between 200 and 250 schools made changes of one type or another that might reflect initial implementation of the MUSE/IPM patterns. Certainly, a number of these schools were not far from accomplishing most of the implementation criteria furnished by the innovations involved (Ironside, 1972, p. 14). Thus, any number that might be offered would unquestionably disguise the "quality" and degree of the installation at particular schools (Ironside, 1972, p. 14).

Therefore, it appeared more suitable to talk of "implementation progress" or to

anticipate future implementation status. In those terms, it was concluded that between 200 and 225 of 287 schools (70% to 78%) made alterations in their organizational and instructional arrangements which could appropriately designate them as “emerging” MUSE/IPM schools (Ironside, 1972, p. 229). These figures, however, included MUSE/IPM schools at extensively diverse phases of implementation and varied levels of commitment. Four to five years later, a number of these emerging MUSE/IPM schools would be categorized as marginal (see Chapter 8). (Note: In general, this group of schools went through either a process of “co-optation” or “mutual adaptation” in the phase of implementation and ended up with “isolated continuation” or “institutionalized change” in the phase of institutionalization, in the phrases of Berman and McLaughlin). Conversely, between 62 and 87 (30% to 22%) of these 287 schools could be classified as non-IGE, or those that did not adopt MUSE/IPM at all. (Note: This group of schools went through a process of “non-implementation” [breakdown or symbolic adoption] and ended up with “discontinuation,” in the phrases of Berman and McLaughlin [1978]).

A follow-up survey showed that of the 67 schools initiating in 9-71 and 1-72, 58 (87%) indicated their schools’ continuing the MUSE/IGE innovations; of the 13 that initiated in 4-72, all eight respondents reported continued participation; and of the 18 that had announced plans to initiate in 9-72, 15 (83%) disclosed that surely they had advanced with those plans (Ironside, 1973, p. 12).

Implementation Summary: Key Factors in Implementing MUSE/IPM

This section answers the question, “What factors either facilitated or hindered the process of implementing MUSE/IPM.” As Fullan (1991) put it, “a large part of the problem of educational change may be less a question of dogmatic resistance and bad intentions and more a question of the difficulties related to planning and coordinating a multilevel social process involving thousands of people” (p. 65). In order to explain why it was difficult to plan and coordinate a multilevel social process and why “co-optation” occurred in some schools and “mutual adaptation” occurred in other schools implementing IGE, I turn to the four key factors that facilitated or hindered the processes of implementing MUSE/IPM in successful and less successful IGE schools: staff

development, role relationship change, shared decision-making, and district support. One of these – district support – is related to the district level while the other three are related to the school building level. This section first examines staff development in nominal, marginal and true IGE schools; then role relationship change and shared decision-making together; and finally district support.

Staff Development

Nominal IGE School. As in Wilkens School, the principal and unit leaders of a nominal IGE school attended a state-sponsored formal staff development workshop in 1971. The principal and unit leaders also participated in a few League activities; however, there were no such opportunities for staff teachers or others. The total staff saw various IGE films once or twice, but several staff teachers indicated that the IGE films were repetitious and unrealistic. The staff was provided the booklets; a 1-day session served as an overview; a few teachers attended a reading workshop (Ironsides, 1972, pp. 175-176).

After these initial training sessions, however, school personnel had virtually no contact with other persons, schools, agencies, or materials related to MUSE/IPM. The state agency did not visit, nor provide other assistance. The school itself also remained aloof: no representatives to League meetings; no teachers attending a problem-oriented workshop; no one visited other nearby IGE schools. A number of resources came from the state coordinator, but since no IGE subject was operative, these were stored away for future perusal by the staff. The state office provided a detailed guide, but it was used minimally. Inservice training was limited to what might occur during unit meetings, or came to a standstill; the use of booklets and filmstrips in and by the “units” virtually ceased (Ironsides, 1972, p. 177; Ironsides, 1973, p. 28).

In a study of eight schools in five different states¹ that discontinued IGE after functioning as IGE schools for three or more years, Gaddis (1977) found that: (1) these schools had conducted initial staff development workshops, which were not that helpful for changing roles and instituting the program; (2) few respondents (teachers, principals,

¹ The names of five states remained confidential (Gaddis, 1977).

and district personnel) had participated in training for assisting staff in making a commitment to IGE; and (3) district office personnel rated “no continuing staff development” as the most significant cause of discontinuance.

Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), it was estimated that this group of nominal IGE schools accounted for about 60% of 200 schools.

Marginal IGE School. As in Union School, the principal, unit leaders, and a few teachers of a low marginal IGE school went to a state-sponsored training for principals and unit leaders in 1971. A reading teacher went to the Wisconsin R&D Center for training in the word-attack part of Wisconsin Design for Reading Skill Development. The staff was exposed to IGE filmstrips and books, followed by a local commitment meeting held for them. They later held a Preschool Workshop for three days, usually in August, consisting of staff meetings, the IIC and unit meetings, and a few hours with a consultant on the word-attack part of Wisconsin Design for Reading Skill Development. Otherwise, educators in marginal schools had little training or discussion relating to the change. While the Preschool Workshop gave considerable attention to new teachers, it focused little on MUSE/IPM plans or operations. Staff impressions, later, were that this offered inadequate preparation (Ironside, 1972, p. 189).

As in Union, there was little or no school-wide inservice training after the Preschool Workshop, and virtually no use of consultants. One unit held its own inservice for ten hours, and another group met on a voluntary basis with the district leader to study the writing of behavioral objectives. The principal, unit leaders, and a few teachers all attended League training activities. However, staff made no visits to other MUSE/IPM schools, though the principal made one such visit. The principal had no direct contacts to the state coordinator for assistance of any kind, though the coordinator made two or three general visits to the school (Ironside, 1972, p. 191).

A high marginal IGE school like Nelson was active in the state League of schools (and the principal was a member of its Hub committee). The principal, unit leaders, and the librarian attended several League training functions during the year of 1971-72, and reported back to the staff that these were valuable sessions (Ironside, 1972, p. 159). High marginal IGE schools called on some external resources: state coordinator, district

liaison, the IGE printed materials, visiting consultants, staff of other schools, district reading consultant, and the League. In addition, the principal and one unit leader attended a R&D Center-sponsored mid-year training workshop (Ironside, 1972, p. 159). Unit leaders and a few teachers made scheduled visits to other MUSE/IPM schools in the vicinity (Ironside, 1972, p. 160).

Nevertheless, the great share of the MUSE/IPM preparation and training was directed to the principal and unit leaders in high marginal IGE schools; except for what unit leaders might pass on, staff teachers were given much less opportunity to talk, study, improve skills, and so on. There was very little inservice training for the whole staff. A few units, e.g., three of five, held inservice training, for a total of from three to five hours in which filmstrips were discussed, IGE booklets were used, and unit operations were considered, with the emphasis on the IGE subject area (Ironside, 1972, p. 160). In relation to overall training, the principal lamented that staff teachers were getting information third-hand and felt that he and unit leaders were not adequate to take on staff training. Also, staff teachers as a group revealed dissatisfaction with the timing and amount of training (Ironside, 1972, p. 160).

Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), it was estimated that this group of marginal (both low and high) IGE schools accounted for about 20% of 200 schools.

True IGE School. As in Birch Lake Elementary, the principal and unit leaders of a true IGE school attended a state-sponsored staff development workshop in 1971. The principal rated it as “good” and felt unit leaders were especially helped. The staff viewed IGE films and strips; all attended college-sponsored conferences in 1970-71. The staff participated in a 1-day local commitment/awareness session and attended the Preschool Workshop held for two days in September. Workshop agenda had four emphases: IIC meeting, general staff meeting, introduction to Wisconsin word-attack design, and lengthy team meetings. The workshop – more a planning session than one devoted to training – included: team assignments, children’s options, use of materials, “rules” for unit and IIC meetings, visit policies, use of open space areas, and so on (Ironside, 1972, p. 196).

After initial training, the principal called on the state coordinator for training materials and assistance with IGE subject. Visits to other MUSE/IPM schools were made in fall 1971. The principal attended League training sessions and school personnel attended workshops sponsored by the R&D Center. The principal, unit leaders, special teachers, and reading teachers attended an R&D Center-sponsored 1-week unit leader training workshop, and reading teachers attended R&D reading workshops in which mutual support sessions with staffs of one or two other MUSE/IPM schools were also held (Ironide, 1972, p. 198).

Also, school-wide inservice took place several times, in one case two days, another for one day, several for an hour or two. The state coordinator was observer and participant at these meetings which involved viewing filmstrips and the "Tuesday" film, and unit solving of problems posed in film. The unit leaders attended a unit leader training session (goal setting and student assessment in the unit), followed by two hours of unit meeting to work out assessment of "unit" accomplishments against criteria in the R&D Implementation Guide. Many teachers criticized filmstrips for their unrealistic parts, but also acknowledged that when seeing them a second time, "they made more sense." Another inservice day included IGE films, team work on math and reading procedures, and development of IGE-type instructional units in science and social studies. Sessions were dovetailed into the district's own inservice schedule so that purposes of non-gradedness, continuous progress, and so on, could be dealt with and IGE materials could be used. The District required four full days for this kind of inservice. Unit inservice was not the rule, though. Three units held one hour inservice sessions for whole year, one unit held sessions for two and a half hours during which IGE films and strips were used at times, and three units held none (Ironside, 1972, pp. 198-199).

Occasionally, a true IGE school hosted a new crop of coordinators for a week's training and observation.² The state coordinator often chose an IGE school because of its general implementation success and ability to serve as a working model; by the same token, the staff benefited from the experience of having visitors who themselves were students of the MUSE and IPM innovations (Ironside, 1972, p. 161).

² This description was taken from Nelson Elementary School because Nelson held some aspects of a true IGE school, although Nelson resembled a high marginal IGE school in general.

Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironside, 1972; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), it was estimated that this group of true IGE schools accounted for about 20% of 200 schools.

The following section deals with both role relationship change and shared decision-making in nominal, marginal, and true IGE schools. It will be noted that these two factors go hand in hand with the above factor – staff development – in changing over to IGE. The following section also touches teamwork and staff commitment occasionally since they were related to and/or affected by role relationship change and shared decision-making in IGE schools.

Role Relationship Change and Shared Decision-Making

Fullan and Pomfret (1977) noted that “the most difficult components of proposed curriculum changes to implement are the role relationship changes” (p. 360) because, they continued, “role occupants are required to alter their usual ways of thinking about themselves and one another and their characteristic ways of behaving towards one another within the organization” (p. 335).

According to the developers of the multiunit model, it was important that the role relationships and responsibilities were clearly specified and understood so that participants in the implementation of MUSE/IPM could interact with one another with a shared understanding of what a participant was expected to do. Getzels and Guba (1957) noted that the more the congruence between the role expectations and the need-dispositions, the higher the feeling of institutional belongingness, the greater the identification with the goals of the system, and the higher the moral (cited in Getzels, Lipham, & Campbell, 1968, p. 80).

In line with role relationship change, the multiunit model also required that the principal turn over systematically some of his/her authority to the units and the individual teacher turn some of his/her authority over to the units (Selover, 1976, pp. 76-77). In other words, principals were expected to share decisions with unit leaders constituting the IIC and individual teachers were expected to work as team.

Nominal IGE School. In nominal IGE schools, there was evidence that principals, unit leaders, and teachers did not share common understandings and

expectations regarding their role relationships and responsibilities. Thus, there were differences in perceptions regarding role behaviors expected of each participant. The past expectations of the participants' roles and responsibilities that were deeply ingrained in the established institutional practices did not easily change in a short time period without a fundamental transformation in the grammar of schooling.

Richardson (1972) conducted a study of the principals in 12 IGE and eleven non-IGE Alabama schools. The principals of both IGE and non-IGE schools, through their self reports of value positions and performance capabilities, revealed the presence of a significant perceptual role conflict; and participation in the implementation of the IGE program during the initial year did not significantly influence the educational leadership behavior of the principals as their behavior was perceived by their respective staffs in 12 Alabama IGE schools (Richardson, 1972, pp. 95-97).

In a study of 48 IGE schools in 32 Wisconsin districts in the fall of 1971, Sheridan (1974) found that the principal, unit leaders, and unit teachers of a nominal IGE school did not hold agreed-upon expectations for certain tasks; thus, each role occupant's overall effectiveness was rated very low: These relationships were broken down as follows: (1) the principal and unit leaders did not agree on expectations for tasks dealing with management activities; thus principal ratings of unit leader overall effectiveness was very low; and (2) unit leaders and teachers did not agree on expectations for tasks related to instructional coordination; thus teacher ratings of unit leader overall effectiveness was very low (Sheridan, 1974).

In addition, there were large differences among principals, teachers, and unit leaders in expectations held for the unit leader role on tasks dealing with instructional coordination and intra-organizational relationships.³ These relationships were broken down as follows: (1) a large difference was found between principals and unit leaders for tasks dealing with instructional coordination; and (2) a sizable difference was found between principals and unit leaders for tasks related to instructional coordination and intraorganizational relationships (Sheridan, 1974).

³ Instructional coordination relates to those activities that the unit leader performs that are directly related to the instructional program, while intraorganizational relationships relate to the unit leader's efforts to provide structure or channels for establishing and maintaining relationships within the school that involve the unit staff or program (Sheridan, 1974, p. 89-92).

Moreover, in a study of 50 IGE principals from eleven states,⁴ Gramenz (1974) found huge differences between: (1) perceptions of principals and unit leaders with regard to the ideal instrumental leader behavior of principals⁵; (2) perceptions of principals and unit teachers with regard to the real supportive leader behavior of principals; and (3) perceptions of principals and unit leaders, and principals and unit teachers, with regard to the real participative leader behavior of principals.

The lack of change in role relationships and responsibilities was related to and/or resulted in the lack of shared decision-making in nominal IGE schools like Wilkens Elementary (see Chapter 5). In nominal IGE schools like Wilkens, neither of the above authority transfers – from the principal to unit and from individual teachers to units – took place. The principal of a nominal IGE school like Wilkens dominated IIC meetings, remained the major decision maker on both managerial and technical matters, provided little opportunity for distribution of decision-making, and handed out meeting agendas that were more like notes and announcements (Ironside, 1973, pp. 28-29).

In nominal IGE schools, unit leaders were not committed to the concept of IGE and did not adequately prepare to discuss and defend in the IIC issues of concern to their unit members; thus they did not fulfill effectively their representation function (Moyle, 1977, p. 222). The lack of effectiveness of the unit leader's representation function in the IIC was related to both the principal's lack of support schoolwide, and to the principal's lack of awareness, understanding, and amelioration of the "administrator-teacher" inter-role conflict found to be experienced by many unit leaders. The lack of effectiveness of the unit leader's representation function also contributed to the lack of cohesiveness of the IIC (Moyle, 1977, p. 222).

In a study of 558 teachers from 35 IGE schools in New Jersey, Selover (1976) found that the teachers in those schools adopting the multiunit school model did not

⁴ Colorado, Connecticut, Illinois, Maine, Minnesota, New Jersey, New York, Ohio, South Carolina, Virginia, and Wisconsin (Gramenz, 1974, p. 59).

⁵ House (1973) presented three leader behavior categories: (1) instrumental leadership behaviors are ones which define roles and relationships, stress rules and regulations, schedule work to be done, stress standards of performance, and explain why tasks should be done; (2) supportive leadership behaviors are ones that build interpersonal relationships, make it pleasant to be a member of the group, help others in overcoming problems, and facilitate change; and (3) participative leadership behaviors are ones that include working directly with others, listening to what subordinates say, asking for suggestions, and involvement of others in making decisions.

perceive a reduction of centralization during the first year of implementation. According to Wright (1976), nominal IGE school teachers perceived themselves to have no involvement in making potent decisions of schoolwide scope; therefore, IGE teachers desired greater involvement in making potent decisions of schoolwide (Wright, 1976; Felker, 1980). In a study of 188 teachers from 48 units representing 12 states,⁶ teachers of nominal IGE schools perceived no representation for themselves provided by the unit leader serving on the IIC (Nerlinger, 1975).

The lack of both change in role expectations and relationships and shared decision-making was highly correlated with the lack of staff commitment. Gaddis (1977) found that after schools had been in the program for a period of time, teacher commitment began to drop off. “Lots of the staff left the school because of the program. It was too much of a strain and they couldn’t cope with the demands of the program,” said one teacher. “Teachers felt it was too much trouble to shift students and they went back to self-contained classrooms,” said another. One respondent indicated that the lack of teacher commitment was brought about in several ways:

IGE was not popular among teachers. The program took too much record keeping and planning time. Units would finish before others and we couldn’t change students. We couldn’t get enough volunteers for grouping. In the three-week cycles, we never felt that we really got to know students. For unit planning time, there was no one to take classes. We didn’t have any specialists. (Gaddis, 1977, p. 191)

Without a change in role expectations and relationships, without shared decision-making, and without commitment, unit teachers showed much resistance to teamwork, were not committed to planning together, held on to their own students, and taught single-aged students in self-contained classroom. Three teachers at Wilkens, for example, implied that they did not ever expect to share children, rooms, resources, teaching skills, or “real” decisions about “their” classrooms (Ironside, 1973, pp. 28-29).

Marginal IGE School. In marginal IGE schools, school personnel understood the roles expected of each occupant, but they had difficulty in overcoming not only the conflict between the old and new role relationships and responsibilities within an individual, but also tensions between role occupants among unit members as well as

⁶ California, Colorado, Connecticut, Illinois, Indiana, Massachusetts, Minnesota, Nebraska, New Jersey, Ohio, South Carolina, and Wisconsin (Nerlinger, 1975, p. 68).

among the personnel as a group. Gaddis (1977) found that principals rated interpersonal conflicts among teachers as the most significant cause of discontinuance of IGE. Further, in a study of four schools in New Jersey, Colorado, and Missouri, Heffernan (1976) found that IGE created an incongruence between the role expectations and needs/dispositions of school personnel. This lack of congruence caused conflicts among the staff. Such conflicts manifested themselves in the form of problems of interpersonal communication, agreement on philosophies and teaching methodologies, and clarification of roles and responsibilities (p. 130).

Sheridan (1974) supported the fact that the principal, unit leaders, and unit teachers of a marginal IGE school did not agree upon expectations for certain tasks; thus, each role occupant's overall effectiveness was rated somewhat low. These relationships were broken down as follows: (1) the principal and unit leaders did not agree on expectations for tasks dealing with management activities; thus principal ratings of unit leader overall effectiveness was somewhat low; and (2) unit leaders and teachers did not agree on expectations for tasks related to instructional coordination; thus teacher ratings of unit leader overall effectiveness was somewhat low (Sheridan, 1974).

In addition, Sheridan (1974) suggested that there were some differences among principals, teachers, and unit leaders of marginal IGE schools in expectations held for the unit leader role on tasks dealing with instructional coordination and intraorganizational relationships. These relationships were broken down as follows: (1) a certain degree of difference was found between principals and unit leaders for tasks dealing with instructional coordination; and (2) a certain degree of difference was found between principals and unit leaders for tasks related to instructional coordination and intraorganizational relationships (Sheridan, 1974).

Also, Gramenz (1974) found differences between: (1) perceptions of principals and unit leaders with regard to the ideal instrumental leader behavior of principals; (2) perceptions of principals and unit teachers with regard to the real supportive leader behavior of principals; and (3) perceptions of principals and unit leaders, and principals and unit teachers, with regard to the real participative leader behavior of principals.

With shared understandings of role relationships and expectations that were not materialized within himself/herself, either the principal or unit teachers of a marginal IGE

school could not turn over his/her authority to the units to a large degree. Sometimes the principals of nominal IGE schools encouraged discussion to some extent during IIC meetings, but remained the major decision maker – especially on managerial matters. In other cases, s/he provided some opportunity for the distribution of decision-making with respect to technical matters. However, the principal of a marginal IGE school, in general, was reluctant to share decision-making, especially at the IIC level (Ironside, 1973, p. 32). In a different study of 1266 teachers and unit leaders from 77 IGE schools in 13 states,⁷ Wright (1976) concluded that teachers perceived IGE principals to be making more potent decisions than was the ideal (see also Goodridge, 1975 and Lacy, 1972).

The unit leader and unit teachers shared common understandings regarding planning and deciding together; however, they had problems when they taught together, while putting their plans and decisions into practice. They tried to solve interpersonal conflicts through various channels, resulting in success some times, but failure many times; or one unit making some progress but another unit not doing well. Moreover, the quality of interpersonal relations was too low for some units to establish a functioning team. The unit leader and teachers of some units shared children, rooms, and resources to a degree; however, they did not share educational philosophies and teaching skills. One or two units' teachers employed team teaching, cooperated in planning, and shared resources while other units' members did not learn how to do much more than plan together, as was the case at Union (Ironside, 1972, p. 190).

In marginal IGE schools, unit leaders were not much committed to the concept of IGE and ill-prepared to discuss and defend in the IIC issues of concern to their unit members; thus unit leaders were less effectively fulfilling their representation function (Moyle, 1977). The low effectiveness of the unit leader's representation function in the IIC was related to both the principal's support school-wide and the principal's awareness, understanding, and amelioration of the "administrator-teacher" inter-role conflict experienced by many unit leaders (Moyle, 1977). The low effectiveness of the unit leader's representation function also contributed to the low cohesiveness of the IIC (Moyle, 1977).

⁷ The 77 participating schools were from 13 states representing New England, the east coast, the southeast, the midwest, the mountain states, and the west coast (Wright, 1976, p. 39).

According to Wright (1976), marginal IGE school teachers perceived themselves to have little involvement in making potent decisions of school-wide scope (Wright, 1976; see also Felker, 1980). In a study of 188 teachers from 48 units representing 12 states, teachers of marginal IGE schools expressed that unit leaders did not fulfill their representation function effectively in the IIC (Nerlinger, 1975).

According to Wright (1976), on the other hand, there was a significant negative relationship between the perceived level of involvement of teachers in the decision-making process and the perceived effectiveness of I&R unit operations, although the negative correlations were minimal. Selover (1976) also found that elementary teachers of IGE schools appeared to be more satisfied with less authority in the hierarchy and wanted little involvement in school-wide decisions (p. 77-78). Further, Moyle (1977) showed that most staff members of marginal IGE schools perceived the decision-making process evolved by each IIC to be somewhat satisfactory, despite their perceptions that they had relatively low influence on the actual decision made (p. 217).

Ironside (1972) noted that across the visit schools, it was the more common practice for principals and unit leaders to remain somewhat separate by the end of 1971-72. Principals frequently addressed agendas "To the IIC" and "From the Principal," thus noting his identity as principal and not as a co-member of the IIC. Typically, unit leaders reinforced this "separation," though in a few cases the IIC appeared to function and consider itself as a committee of equals (Ironside, 1972, p. 210).

In a study of four multiunit schools considered top rated in Wisconsin in terms of Multiunit reputation, structure, and behavior, John S. Packard (1973) found that in marginal IGE schools where unit leaders were appointed by the principal, 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. Outside the council meetings, the principal was generally consulted to approve many of the activities which the units intended to perform. Although teachers continued to exercise much discretion, considerable influence was effectuated informally in interactions outside of scheduled meetings. Although principals saw their roles as changed, none reported feeling the loss of decision-making prerogatives (Packard, 1973, pp. 110-111).

True IGE School. With shared understandings of changed role relationships and expectations among themselves, school personnel of true IGE schools overcame not only conflicts between the old and new role relationships and responsibilities among individuals, but also tensions between the principal and unit leaders as well as those among unit members. Whenever there was an interpersonal conflict, they solved these conflicts through constructive discussions during formal unit meetings and informal encounters. In doing so, they moved from a self-contained classroom to a team-oriented unit. However, even true IGE schools could not reach a point where they completely solved inter-unit communications or school-wide coordination problems. Given the demands for maintaining rationalized practices to handle a batch of students, it was a fundamental transformation for them to cooperate between units and achieve school-wide coordination that proved practically impossible.

Sheridan (1974) found that the principal, unit leaders, and unit teachers of a true IGE school agreed upon expectations for certain tasks; thus, each role occupant's overall effectiveness was rated high. These relationships were broken down as follows: (1) the principal and unit leaders agreed on expectations for tasks dealing with management activities; thus principal ratings of unit leader overall effectiveness was high; and (2) unit leaders and teachers agreed on expectations for tasks related to instructional coordination; thus teacher ratings of unit leader overall effectiveness was high (Sheridan, 1974).

In addition, Sheridan (1974) observed no significant differences among principals, teachers, and unit leaders in expectations held for the unit leader role on tasks dealing with instructional coordination and intraorganizational relationships. These relationships were broken down as follows: (1) no significant difference was found between principals and unit leaders for tasks dealing with instructional coordination; and (2) no significant difference was found between principals and unit leaders for tasks related to instructional coordination and intraorganizational relationships (Sheridan, 1974).

Moreover, Gramenz (1974) found no significant differences in true IGE schools between: (1) perceptions of principals and unit leaders with regard to the ideal instrumental leader behavior of principals; (2) perceptions of principals and unit teachers with regard to the real supportive leader behavior of principals; and (3) perceptions of

principals and unit leaders, and principals and unit teachers, with regard to the real participative leader behavior of principals.

In relation to shared decision-making in true IGE schools, both the principal and unit teachers turned over authority to the units. In successful IGE schools like Birch Lake Elementary, the principal shared his/her authority and power to make decisions with unit leaders; thus the IIC meetings were characterized by effective leadership by the principal, give-and-take, productive use of time, and participation by all (see Chapter 5). In these schools, decision-making was characterized more by consensus, participatory and delegating styles than by unilateralism (see Chapter 1). The principal of Rocky Mountain School (see Chapter 7) encouraged increased participation, although she felt that it was necessary for the staff to improve decision-making skills. When there was a concern with the communication between principal and staff, the principal (and IIC's) sought to solve the problem via staff meetings, principal attending unit meetings, notices, parties, and so on (Ironsides, 1972, p. 210). In addition, unit members planned, decided, and taught together. They shared children, rooms, resources, teaching skills; and teams of teachers and aides worked together with varied groups of students, often in an open space area.

In true IGE schools, unit leaders were committed to the concept of IGE and adequately prepared to discuss and defend with in the IIC issues of concern to their unit members; thus they effectively fulfilled their representation function (Moyle, 1977). The effectiveness of the unit leader's representation function in the IIC was enhanced by both the principal's support school-wide, and by the principal's awareness, understanding, and amelioration of the "administrator-teacher" inter-role conflict found to be experienced by many unit leaders (Moyle, 1977). The effectiveness of the unit leader's representation function also contributed to the cohesiveness of the IIC through the facilitation of horizontal and vertical, two-way communication (Moyle, 1977).

Packard (1973) found that key differences among schools in the redistribution of authority appeared to hinge on whether or not unit leaders were appointed. In the one school where unit leaders emerged following a year of experimentation, units were relatively self-reliant, conducted their internal affairs without assistance for the most part, and 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 (Packard, 1973, pp. 110-111).

In relation to role relationship change and individual teachers’ authority transfer to units in four IGE schools, Packard (1973) identified three implementation patterns: (1) teaming, (2) shifts in the reward structure, and (3) changes in flow of communication. In regard to teaming, collaboration was associated with personal cost as well as personal gain. While most units had a history free from severe internal rupture and exhibited close interpersonal involvements and relatively intense work relations, some units suffered internal strife. The root issue seemed to be the degree to which unit decisions bound individual members or subgroups to definite behaviors and approaches. In silent testimony to the growth and course of interpersonal relations among unit members were the “moving desks.” Teachers collaborated in curriculum development efforts and in preparing new lessons for the unit but did not freely part with personal, independently developed lessons. Many teachers found work relations with colleagues to be both pleasant and beneficial – additional reasons for not abandoning the team approach (Packard, 1973, pp. 114-115).

In relation to rewards, in the shift from personal to group property, teachers seemed to lack fulfillment and lose pride in ownership of, as well as feelings of responsibility for, classroom events. Since students moved among teachers for classes, the sense of owning children and the rewards from getting close to them seemed diminished. On the other hand, ownership of objects and areas was maintained (Packard, 1973, pp. 115-116).

Units became loci of comfortable and frequent work-related conversation; the principal talked with unit leaders more or less exclusively and thus was removed as the hub of the flow of much information. Loci of intense communication were unit planning areas, the faculty lounge, unit and faculty council meetings. Informal links tended to parallel formal communication structures vertically and horizontally. Although it was not obvious whether these communication patterns were associated with problems, considerably limited information links seemed to result in systematic misperception (Packard and Willower, 1972) and indeed, unfounded rumors, jealousies and feelings of superiority characterized somewhat the feelings of unit members for other units (Packard,

1973, p. 117).

According to Wright (1976), true IGE school teachers perceived themselves to have some involvement in making potent decisions of school-wide scope and little involvement in making potent decisions of extra-school scope; therefore, IGE teachers desired greater involvement in making potent decisions of school-wide and extra-school scope (see also Felker, 1980). In a study of 188 teachers from 48 units representing 12 states, teachers of true IGE schools perceived themselves to have little involvement in the decision-making process, but perceived that unit leaders effectively fulfilled their representation function in the IIC (Nerlinger, 1975). Moyle (1977) showed that most staff members of true IGE schools perceived the decision-making process evolved by each IIC to be satisfactory, despite their perceptions that they had moderate influence on the actual decision made (p. 217).

With shared role expectations and shared decision-making, units of a true IGE school, like Birch Lake, moved smoothly through planning, scheduling, teaching assignments, parent communications, and so on. The units had good leadership and open communication, and their meetings were productive. All units worked out “team groundrules” (Ironsides, 1972, p. 196).

School District Support

Nominal IGE School. Gaddis (1977) found that: (1) some districts had not fulfilled their commitment to assist schools in implementing IGE; and (2) the withdrawal of district financial support was a major cause of discontinuance (pp. 188-198).

The impact on the IGE program by the withdrawal of district financial support was felt in several ways: aides were cut back or completely eliminated from schools, or the student-teacher program was dropped. Consequently, teachers had a hard time grouping and no clerical help for record keeping (Gaddis, 1977, p. 192).

Another financial issue which caused discontent among school personnel was unit leader pay. After several years of implementation, teachers felt that unit leaders should have extra pay and went to the board with their all or nothing request. However, when the district turned down their request for unit leader pay, the district was no longer seen committed to the program and the school dropped IGE (Gaddis, 1977, p. 193).

In other school districts, rivalry over district funds existed between IGE and non-IGE schools. Non-IGE schools felt they were being slighted because IGE schools received additional resources, creating pressure on districts to drop the program. To avoid the rivalry issue, districts simply withdrew their commitment to support IGE and the program was eliminated (Gaddis, 1977, p. 193).

As Shane (1973) maintained, a community could contribute to the failure of a program by not supporting increases in local school taxes to support the innovation. “After our local tax referendum lost out, our IGE program was the top priority to be cut,” one teacher said. A community member complained, “Why should I support the program? I didn’t have it when I was in school.” “The impact on the schools,” reported one school person, “meant that clerical help was no longer available, there were no resource people to help schools follow the model, IGE inservice was discontinued, and unit leaders lost their released time” (Gaddis, 1977, p. 194).

Concerning lack of district commitment and lack of commitment by the school board, staff members in Gaddis’s study said that they didn’t get any help from district personnel. According to them, the board had been very supportive of the program, but discontinued it in part because of the lack of student gains and in part because of pressure from a group of conservative parents (Gaddis, 1977, p. 195).

The importance of the role of the superintendent in fostering or discontinuing the program was shown in the following comments by participants in Gaddis’s study: “The superintendent learned about IGE and took district people to Madison. They brought the ideas back to the schools. The teachers felt their own setting was not like the model but they would try it anyway. A new superintendent came in with a different philosophy and the program was discontinued.” The change in superintendent did make a difference in other schools: “Our former superintendent was very pro-IGE and he encouraged schools to go IGE,” said a district officer. “When the superintendent left, the district developed a different philosophy. Instead of having 139 different programs going, we have only two and IGE isn’t one of them” (Gaddis, 1977, p. 195).

Marginal IGE School. Here, the superintendent, and particularly the school board, were supportive and helpful; this support included considerable expenditures for

materials, travel, and summer workshops.⁸ The Board's formal monthly newsletter pushed the IGE concepts and informed parents simultaneously. The superintendent went on record with this view: "Our participation in no way represents a wholesale adoption of a rigidly defined research model. On the contrary, flexible adaptation will be the rule" (Ironsides, 1972, p. 175). In marginal IGE schools, district personnel were generally supportive, and in fact had steered extra funds for materials, addition of aides, and so on (Ironsides, 1972, p. 153). At the district level, a local liaison was appointed early, and this person, along with the superintendent, attended all meetings of the formal training chain except a "national awareness" session. The liaison indicated "interest in team teaching and individualized instruction" as the major consideration underlying district adoption of MUSE/IPM. A district reading consultant was often assigned to serve multiple MUSE/IPM schools. Both these persons had been an integral and continuing part of the installation effort at marginal IGE schools like Nelson (Ironsides, 1972, p. 153). The district liaison helped the school with a plan for developing and implementing an IGE curriculum, including how best to use aides, what supplemental materials to have available, and how to keep records (Ironsides, 1972, p. 159).

True IGE School. The school district supported a true IGE school in different ways. As in Birch Lake Elementary, for example, the district had definite inservice schedules, and devoted summer work to the development of objectives and outlines in reading and math. Both activities were relevant to events in true IGE schools like Birch Lake Elementary. Also, these districts tended to have strong curriculum committees, which in effect served the district policy function regarding MUSE/IPM in the school (Ironsides, 1972, p. 195).

The following case studies detail the processes that IGE schools went through during the continuation period (following the phase of implementation). These cases illustrate how successful IGE schools continued MUSE/IPM after adapting MUSE/IPM to local circumstances while transforming the traditional school organization and teaching practices into MUSE/IPM. Through mutual adaptation, these true IGE schools

⁸ This description was taken from Wilkens Elementary School because this aspect of district support resembled that of a marginal IGE school, although Wilkens was classified as a nominal IGE school in Chapter 5.

created diverse types of hybridization to accommodate the demands of MUSE/IPM. Thus, successful continuation of MUSE/IPM brought about institutionalized change with some components of MUSE/IPM and limited or failed institutionalization of the other components.

PART FOUR

**THE INSTITUTIONALIZATION OF
THE MULTI-UNIT SCHOOL-ELEMENTARY
AND THE INSTRUCTIONAL PROGRAMMING
MODEL, 1974-1981**

Chapter 7
Refinement and Renewal:
Mutual Adaptation Between IGE and Local Schools, 1974-1981

As shown in Chapter 6, about 200 (70%) of 287 schools made changes of one sort or another which might be taken to represent initial implementation of the MUSE/IPM innovations. These schools that made changes in their organizational and instructional patterns could properly be labeled as emerging MUSE/IPM schools. However, while some of these schools were close to fulfilling most of the implementation criteria involved, any figure that might be provided would almost surely mask the “quality” and extent of the installation at individual schools. As it turned out, many of these emerging MUSE/IPM schools would either face unexpected problems to solve, or abandon one element or another – events which in turn caused the slow erosion of the IGE program. As we will see, even these committed IGE schools could not overcome some of the critical hurdles encountered in the phases of refinement and renewal toward institutionalizing IGE as a permanent system (Ironside, 1972; 1979).

This chapter examines three IGE schools. Adapted from Klenke (1975) and Melvin (1976), these three case studies document general efforts to implement and institutionalize MUSE/IPM and the specific ways in which practitioners dealt with implementation problems that arose after they went through the phase of changeover in three states: Colorado, New Jersey, and New York. With the purpose of showing the degree of and key factors in institutionalization of MSUE/IPM, i.e., the *content* and *process* of institutionalization, in each of these schools during 1971-1976, their descriptions will center on the following areas of school operation: history and background, events related to mobilization, implementation and continuation, the multi-unit organization, and IPM instruction.

**Institutionalization of Shared Decision-making, Team Teaching, and Partial IPM:
 Rocky Mountain Elementary School, Colorado**

This first case study, adapted from Klenke (1975), is about Rocky Mountain Elementary School, a school that had received “broad-based support” during the phase of mobilization. Here “mutual adaptation” between the reform (MUSE/IPM) and the school

occurred during the phase of implementation, followed by “institutionalized change” regarding some components of MUSE/IPM – shared decision-making, team teaching, instructional programming, and pre-assessment – and “limited or failed institutionalization” regarding other MUSE/IPM components – differentiated staffing, multi-aging, non-gradedness, continuous progress, and criterion-referenced assessment.

Rocky Mountain Elementary School was successful in the phases of mobilization, implementation, and institutionalization of MUSE/IPM between 1971 and 1975. However, the staff as well as the principal had to adapt MUSE/IPM to local circumstances and thus hybridize their work. For example, local constraints were preventing the school from developing a differentiated staff (Klenke, 1975, p. 95). No effort was made by the staff to specify school-wide objectives, nor was any effort made to coordinate the achievement of these objectives. Also, the lack of inter-team cooperation did not allow for this school-wide coordination. Most instructional decisions were made at the team level; and the decision boundaries were constrained by county guidelines. The new principal encouraged increased participation, but felt that it was necessary for the staff to improve decision-making skills. The intermediate team incorporated the multi-age pattern into their instructional groupings; however, almost all instructional groups were ability grouped. Further, the upper team incorporated “very little” multiage grouping of students. The homeroom groups, therefore, were by grade level; and instructional groups were formed by ability levels within grade levels. Despite the many benefits of multiage grouping, the parents used the conventional “combination classroom” (e.g., a second- and third-grade combination) as a reference point. There were benefits reported in relation to criterion referenced assessment; however, the staff’s resistance to its use also arose in association with community norms that required a comparison of student growth with grade level norms.

History and Background

Rocky Mountain School was located in a predominantly white, upper-middle class suburb with a population of approximately 20,000 residents. Some families had residential histories dating back to the early 1900’s. An estimated fifty percent of the residents occupied some type of governmental position: military, diplomatic, or political

office holder. Many residents commuted to work in the surrounding communities (Klenke, 1975, p. 90).

The approximately 500 students attending Rocky School were drawn from a wealthy section of the city. They were served by a staff consisting of one principal, twenty teachers, and eight full- and part-time aides and secretaries. District services were provided in the areas of psychological evaluation; speech, vision, and hearing therapy; health services; and orchestral and band instruction (Klenke, 1975, p. 91).

Individualization, through the implementation of IGE, was preceded at this school 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 (Klenke, 1975, pp. 91-92).

The school 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 and major renovation was completed in 1964 to create the existing structure (Klenke, 1975, pp. 90-91). 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, would add a gymnasium and refurbish one wing to create an open model. It was projected that all students would be housed in the open module while the remaining portion of the existing structure would be used for a variety of other programs: pre-school, special education, and an art laboratory (Klenke, 1975, p. 91).

From Mobilization To Institutionalization, 1971-74

The first year of IGE, 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. Curricular change occurred through the implementation of the Wisconsin Design

for Reading Skill Development. Some modifications had to be made in the recommended multiunit organization because of local constraints on staffing, particularly in the employment of paraprofessionals. "All we had were the teachers" was the way the principal described the first year's staffing patterns (Klenke, 1975, p. 95). It became increasingly clear to the principal and staff that local constraints were preventing the staff from implementing IGE 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 (Klenke, 1975, p. 95).

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. 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 (Klenke, 1975, p. 96).

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 Rocky Mountain School (Klenke, 1975, p. 96). Funding for this program was applied for and granted through the state's pilot project program. It was approved as a three-year project, starting in 1972-73 (Klenke, 1975, p. 96).

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 different administrative style 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 became frustrated with the acting principal, while other teachers found the acting principal a welcome relief. When it was announced in July 1974, that the principal would not be returning to Rocky Mountain School, indications were that some teachers would be requesting a transfer, if the acting principal was assigned the principalship. It was also indicated that some teachers planned to transfer if the principal had returned to Rocky Mountain School (Klenke, 1975, pp. 96-

99).

The school year of 1974-75 began on a note of uncertainty, 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 portable classrooms made movement of children within the units more difficult, particularly with the approaching cold winter. 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 (p. 99).

The year also began with a new principal whose 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 one 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 Rocky Mountain School (Klenke, 1975, pp. 99-100).

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 (Klenke, 1975, p. 100).

The Multiunit Organization

The school's multiunit organization incorporated differentiated staffing, multiage grouping of students, non-gradeness, shared decision making, and teaming (Klenke, 1975, p. 100).

Differentiated Staffing. Four distinct roles were utilized within Rocky Mountain School's multiunit design: principal, team leader, staff teacher, and aide. None of these four roles were formally defined (Klenke, 1975, p. 102). Nor was differentiated staffing achieved as recommended in the prototypic multi-unit organization model because of local constraints on staffing, particularly in the employment of paraprofessionals (Klenke,

1975, p. 95).

Teaming. The organization of the school into teaching teams began prior to the implementation of IGE and the school's organization into a multiunit design. Benefits derived from teaming were reported to help both students and teachers. One 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 (Klenke, 1975, p. 109).

Nonetheless, 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 in the school 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" (Klenke, 1975, p. 110).

Teaming at Rocky Mountain School 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, 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" (Klenke, 1975, p. 110).

The year of 1975 was also seen as the beginning of an effort to improve the interrelationships among teams. The change in materials and supply availability is an example. In previous years each team maintained its own store of instructional materials

and supplies, including everything from pencils and pens to constructional paper and tape. Little, if any, sharing of these supplies was reported to have occurred. At the August meeting staff members decided to create a central supply area for those materials to be shared among all staff members. This now became the practice at Rocky Mountain School (Klenke, 1975, pp. 110-111).

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 Rocky Mountain School. These were the Team Leader Meeting (IIC) at the school level and the Team at the classroom level. The Team Leader Meeting was an irregularly scheduled time 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 overall operations (Klenke, 1975, p. 111).

The specific agenda items could come from several sources. The principal and team leaders had direct access to placement of items on the agenda, though staff members could give the team leader agenda items if they had school-wide implications. 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” (Klenke, 1975, pp. 111-112).

Most decisions were made, instead, by the team during its team meeting. The only constraints creating decision boundaries were established by county guidelines. Most instructional decisions were made at the team level and each member had a voice in those decisions. These decisions 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 (Klenke,

1975, p. 112).

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 limited to providing the principal with a request for supplies and materials. The suggested procedure to be utilized in 1974-75 involved staff in the total process. Each team was to compile a materials and supplies request, then team requests were to be compiled, duplicate materials eliminated, and needed changes made at the Team Leader Meeting. This system would also provide an increased awareness of available materials within the school (Klenke, 1975, pp. 112-113).

Multiage Grouping of Students. Multiage grouping, the practice of placing students of different grade levels within the same group, 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 (Klenke, 1975, p. 105).

The first assignment of children to the unit by the principal was subject to parental requests. Parents could “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? (Klenke, 1975, p. 105).

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” (Klenke, 1975, p. 105).

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.” (Klenke, 1975, p. 106).

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 (Klenke, 1975, p. 106).

These multiage grouping practices represented a change from those of the previous year, a year in which multiage grouping throughout the school 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” (Klenke, 1975, p. 106).

Despite the many variations in multiage grouping practices there was a favorable feeling toward the practice as well as seeing it as an important change from 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,” while it promoted decisions in program development that accommodated teacher and learner needs, according to

another (Klenke, 1975, p. 107).

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: “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,” or as “combined grades as is traditionally taught” (Klenke, 1975, p. 107).

Non-gradedness. As defined by a parent, non-gradedness was “first and second graders in the same room. Not making each child do the same thing.” “Placement by ability and age” was the description offered by a teacher. A parent saw non-gradedness as “children of different grade levels working together.” Interestingly, most descriptions of non-gradedness incorporated the use of grading. A teacher offered a possible explanation: “Wasting too much time on non-gradedness. 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 non-graded but, ‘ha, ha,’ we are not” (Klenke, 1975, p. 108). This explanation was given by a staff member but also extended into the parental community. One parent observed that “this non-gradedness may be emphasized but not carried out here.” Another felt that “a lot of parents want to know what grade their children are in” (Klenke, 1975, p. 108).

Reported advantages of non-gradedness 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 non-grading, she also felt it became a “weakness” in the program when students had to leave Rocky Mountain School to go to a graded school. “This is important,” she stated,

“because of the school’s high transiency level.” Another parent said that non-gradedness 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” (Klenke, 1975, p. 108).

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 (Klenke, 1975, p. 109).

IPM Instruction

Instructional Programming. Instructional programming 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 a list of approved county-wide objectives for all the curricular offerings in the school district. By 1974-75, the objectives had become the basis for the instructional program at Rocky Mountain School. However, 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” (Klenke, 1975, p. 113).

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 test were provided in curricular materials. The use of the Wisconsin Design for Reading Skill Development materials was an example of this

exception. The standardized test was used to measure pupil achievement and identify children with special learning needs (Klenke, 1975, pp. 113-114).

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. 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" (Klenke, 1975, p. 114).

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 grouping 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 (Klenke, 1975, p. 114).

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 her/his children. Each teacher had the responsibility to select appropriate methodologies and materials and form smaller subgroups if necessary. This was the place where the staff felt individualization of instruction best occurred, with each individual teacher providing for differences among children (Klenke, 1975, pp. 114-115).

Continuous Progress. Continuous progress was not well understood or implemented at Rocky Mountain School and staff 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" (Klenke, 1975, p. 115).

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 that 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 the results of the Wisconsin Design for Reading Skill Development tests were “translated into traditional grade-level thinking” (Klenke, 1975, p. 115).

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” (Klenke, 1975, pp. 115-116).

Preassessment was a concern of parents. One parent reported that the “concept is excellent” but the practices used at Rocky Mountain School were upsetting. Summing up her 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 one 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 offered an example to illustrate her point: “The Metropolitan Reading 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” (Klenke, 1975, p. 116).

Test frequency was also reported to have had an impact upon the children. Because of test frequency the implication was that children learned “how-to” take tests and could therefore “beat the system.” And children “are masters at that,” according to one parent (Klenke, 1975, p. 116).

Summarizing Statement

Of the eight “continuation criteria,” the situation at the end of 1974 was: (1) Rocky Mountain had an active IIC; (2) Rocky Mountain had differentiated staff

functions, but fell short of the recommendations by the R&D Center; (3) Rocky Mountain was fully unitized; (4) the level of cooperation among unit teachers as a team was high; (5) the level of commitment by teachers was high; (6) students were multi-aged in two units, but not in one unit; (7) IPM was followed to a large degree in WDRSD; and (8) the level of open communications within teams was high, but not between teams (Ironsides, 1972, p. 200).

In terms of key factors in the phase of implementation, (1) the level of external support available was high at Rocky Mountain; (2) the principal, unit leaders, and unit teachers called upon external resources for continued inservice; and (3) the school made appropriate modifications to the IGE program.

In sum, Rocky Mountain Elementary School was successful in the phases of mobilization, implementation, and institutionalization of MUSE/IPM from 1971 to 1975. However, the staff as well as the principal had to adapt reforms to local circumstances and thus hybridize MUSE/IPM. Local constraints were preventing the school from developing a differentiated staff and the school lacked appropriate instructional materials and instructional hardware (Klenke, 1975, p. 95). And the school still had some other problems unsolved. 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. Also, the lack of inter-team cooperation and communication did not allow for this schoolwide coordination. Most instructional decisions were made at the team level, though decision boundaries were constrained by county guidelines. The new principal encouraged the increased participation but saw it as an evolutionary process. She felt that it was necessary for the staff to improve decision-making skills before being given full participation in decision making.

The intermediate team incorporated the multiage pattern into their instructional groupings; however, the team narrowed the definition and basis for grouping and thus almost all instructional groups were ability grouped. Further, the upper team incorporated "very little" multiage grouping of students. The homeroom groups were organized by grade level while instructional groups were formed by ability levels within grade levels. Despite the many benefits of multiage grouping, the parents, almost without exception,

used the conventional “combination classroom” as a reference point. There were benefits reported in relation to criterion referenced assessment; however, resistance to its use arose based upon the staff’s perception of community norms requiring a comparison of student growth with grade level norms.

In sum, at Rocky Mountain Elementary – a school with “broad-based support” during the phase of mobilization – “mutual adaptation” between the reform (MUSE/IPM) and the school occurred during the phase of implementation, followed by “institutionalized change” with some components of MUSE/IPM – shared decision-making, team teaching, instructional programming, and pre-assessment – and “limited or failed institutionalization” regarding other MUSE/IPM components – differentiated staffing, multi-aging, non-gradedness, continuous progress, and criterion-referenced assessment.

**Institutionalization of Shared Decision-making, Differentiated Staffing,
Team Teaching, Multi-aging, and Partial IPM:
Scott Elementary School, New Jersey**

This second case study, adapted from Klenke (1975), is about Scott Elementary School, where “broad-based support” occurred during the phase of mobilization, and where “mutual adaptation” between the reform (MUSE/IPM) and the school occurred during the phase of implementation. “Institutionalized change” followed, with respect to shared decision-making, differentiated staffing, team teaching, instructional programming, continued progress, criterion-referenced assessment, and pre-assessment, though “failed institutionalization” could be seen with some other MUSE/IPM components – multi-aging and non-gradedness.

Scott Elementary was successful in the phases of mobilization, implementation, and institutionalization of MUSE/IPM in 1971-75, although district requirements presented many difficulties in achieving non-gradedness and the school still had unsolved problems. In general, Scott School resembles much of the ideal MUSE/IPM. However, regarding multiage grouping, the staff of Unit G felt that the primary children, particularly the first graders needed the security of one teacher more than movement and exposure to many different teachers and aides (Klenke, 1975, p. 133). Despite all effort to

deemphasize references to grades and grade levels with staff, children, and parents, the notion of gradedness still existed. Several incidents were reported that illustrated the possible reasons for this situation, though district requirements seemed to present many of the difficulties in achieving non-gradedness.

History and Background

The east ridge of the Union Mountains provides the backdrop for the city of Jefferson. Scott Elementary was located in the rapidly expanding southern limits of Jefferson. Built in 1970-71 and opened in September, 1972, the popular open-pod design provided the architectural arrangement of the school's facilities. Two large open instructional pods and the school's office facilities encircled the central Instructional Media Center. The kindergarten area was an open area adjoining one of the larger instructional pod areas (Klenke, 1975, p. 117).

As early as 1968 plans were being made for a few elementary schools 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, Scott Elementary, was scheduled to open in fall of 1972 (Klenke, 1975, p. 118).

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 at Scott. At this time their orientation was for an alternative form of education. Following the administrator's suggestion, the group visited one of the district's schools and talked to its principal about their program of IGE (Klenke, 1975, p. 119).

In the spring of 1972, a meeting was held between the same parents and the central office administrator. This meeting focused upon a specific program for Scott: IGE. The initial efforts of this small group of parents generated a minority of parental support for the implementation of IGE at Scott School. 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” (Klenke, 1975, p. 119).

The specific direction for the program at Scott began with the transfer of the principal from the existing IGE school to Scott. In the spring of 1972 the principal began staffing – a process that served to begin the crystallization of the program when the principal brought four staff members from the established IGE school to Scott. The direction of the program was finalized when the entire staff voted in April to establish IGE at Scott Elementary School (Klenke, 1975, p. 119).

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 was arranged and conducted throughout the spring and summer for those Scott staff members living in the area. A few staff members were completing contractual obligations in other school districts and could not attend these meetings (Klenke, 1975, p. 120).

June 1972 also marked the beginning of parental inservice by conducting a meeting to explain the program at Scott. In this large group meeting, parents were presented with their initial introduction to IGE 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 seeking more information (Klenke, 1975, p. 120).

Continuing throughout the summer were several informal staff meetings held to prepare for the upcoming school year. In August the total staff met for one week to finalize plans and preparation for 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. Scott Elementary 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, IGE (Klenke, 1975, p. 120).

From Mobilization To Institutionalization, 1971-74

Scott School 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, though the

school was designed to house only 350 students (Klenke, 1975, pp. 120-121).

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 Scott School. 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 (Klenke, 1975, p. 121).

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 responses directed to the school district's central office forced them to request that Scott demonstrate parental support for the recommended plan. Returns from a mailed ballot in November showed that 84% of parent supported the proposed plan (Klenke, 1975, p. 121).

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 (Klenke, 1975, p. 121). One parent stated that 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. She also said that her husband maintained their daughter could not write or spell (Klenke, 1975, p. 122). Moreover, she reported that the school lacked follow-up with parents and student. However, the same parent admitted that there was "a great advantage" to the grouping patterns at Scott School because "children do learn by needs." She also reported that although her daughter was not getting the basic skills, she was very happy at school (Klenke, 1975, p. 122). Another parent reported withdrawing 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 (Klenke, 1975, pp. 122-123).

The spring of 1974 marked the beginning of a change in administrative leadership at Scott, 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 Scott would assume the principalship beginning with the 1974-75 school year (Klenke, 1975, p. 123).

The school year of 1974-75 began with a new principal. The administrative changeover was orderly, facilitated by the new principal's previous employment at Scott and an administrative style that 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 (Klenke, 1975, p. 123).

The Multiunit Organization

The school's multiunit organization in 1974-75 included the two organizational components recommended by the Wisconsin R&D Center: the IIC and the Unit. Practices embracing differentiated staffing, teaming, shared decision making, multiage grouping of students, and nongradedness were incorporated into the operationalization of the multiunit organization (Klenke, 1975, p. 125).

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 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” (Klenke, 1975, p. 125).

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 (Klenke, 1975, p. 125).

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 (Klenke, 1975, p. 135).

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 and assumed the leadership or 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 (Klenke, 1975, p. 136).

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 who 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 (Klenke, 1975, p. 136).

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 (Klenke, 1975, p. 137).

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" (Klenke, 1975, p.

137).

This practice of matching teacher and student groups to improve individualized instruction also highlighted the need to consider teachers as well as students as individuals. A unit leader described the importance of the individualization of teachers: “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” (Klenke, 1975, p. 137).

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, physical education, important program 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 dic[t]ated to you by others. We have a voice in school... We get support here at Scott School. We can accomplish and implement our philosophy through IGE and the team. You can’t do that in a self-contained school” (Klenke, 1975, p. 138).

The start of the school year found the equivalent of 0.5 unfilled staff positions. The IIC made the decision to employ an aide to 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 (Klenke, 1975, p. 138).

A similar feeling was expressed by members of the unit responsible for the district’s deaf education program. This unit leader stated, “You team teach along with the regular unit. Treat the deaf kids like normal kids. 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” (Klenke, 1975, p. 138).

Shared Decision Making. Decision making occurred at two organizational levels, the IIC and the I&R Unit. The IIC’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 I&R Unit level pivoted around the day-to-day

operations of the instructional program (Klenke, 1975, p. 140).

The importance of participating in the decision-making process was highlighted by a teacher who said, "You feel better if you are involved in decisions that directly affect you." She proceeded to describe a check in the decision process at the unit level stating, "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" (Klenke, 1975, p. 141).

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 I&R units, assumed this responsibility. 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 print). 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" (Klenke, 1975, p. 141).

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 include a parent-staff committee organized to keep the reporting system current. The implementation of a year-round school program at Scott and the use of the nature center was also being considered through the use of ad hoc staff-parent committees (Klenke, 1975, p. 142).

Participation in decisions was not limited to the regular education teachers. One unit 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" (Klenke, 1975, p. 142).

Multiage Grouping of Students. 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 (Klenke, 1975, p. 129).

Each unit had children of different age levels encompassing 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” (Klenke, 1975, p. 130).

One teacher reported that some parents had queried her about the reasons for dividing 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 (Klenke, 1975, pp. 130-131).

In addition to the multi-aged assignments of children to each of the units, multiage grouping occurred for homeroom and 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. The Unit K 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” (Klenke, 1975, p. 131).

Reactions to the multi-aging practice at Scott School could be grouped into two categories. The first category characterized multi-aging 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 programming for students. The practice permitted a variety of instructional options that facilitated the total growth of each child through an individualized philosophy and program (Klenke, 1975, p. 131).

The reflection of social reality reported to be enhanced by multi-aging practices was described in many different ways. It assisted in the development of a “helping” attitude on the part of children. While it might not eliminate social and behavioral labeling of children, i.e., the class clown, the social bully, and the real discipline problem, the labeling could be reduced through multi-aging practices (Klenke, 1975, p. 132).

Social reality was also encouraged through multi-age grouping by developing an appreciation for 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 [normally 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 (Klenke, 1975, p. 132).

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 (Klenke, 1975, p. 132).

Although the school’s implementation of multi-aging 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 excessive movement and exposure to many different teachers and aides. They had to be socialized into the world of education and this socialization included providing each child with the security of one teacher (Klenke, 1975, p. 133).

Non-gradedness. A conscious effort was made to eliminate a graded concept at Scott School. This was done in discussion and in practice. Descriptions of non-gradedness placed instruction as a common reference point. A teacher described non-gradedness 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 (Klenke, 1975, p. 134).

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 possible reasons for the difficulty in eliminating this and the efforts the staff had made toward reaching a non-graded environment. A parent described an incident illustrating the effort exerted by children: “If someone on a tour [of Scott School], which is almost always conducted by a child, asks about grade levels, the kid sort of reprimands the person for even considering that grades are a part of the program [at Scott School]” (Klenke, 1975, p. 134).

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” (Klenke, 1975, pp. 134-135).

District requirements seemed to present many of the difficulties in achieving non-gradedness. A teacher outlined these as “district reports, tests, and grade level objectives.” A unit leader illustrated how her unit had 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” (Klenke, 1975, p. 135).

IPM Instruction

Instructional Programming. The emphasis on educational accountability by the state and local school district provided assistance to the instructional programming effort at Scott School. 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 (Klenke, 1975, p. 142).

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 between 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 (Klenke, 1975, p. 143).

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, "[they might] be 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 (Klenke, 1975, p. 143).

Postassessment followed instruction, with the general instructional process beginning anew—select new objectives, preassess, group for instruction, implement instructional activities, and postassess (Klenke, 1975, p. 143).

Several specific improvements in the instructional program were cited. As one unit leader explained: "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: "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" (Klenke, 1975, p. 144).

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” (Klenke, 1975, p. 145).

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 though this was a promotion, like a grade” (Klenke, 1975, p. 145).

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” (Klenke, 1975, p. 145).

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 (Klenke, 1975, p. 146).

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 objectives; 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" (Klenke, 1975, p. 146).

Preassessment. "Preassessment is a test that can be used to indicate where a child is" was the description 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" (Klenke, 1975, p. 147).

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" (Klenke, 1975, p. 147).

Summarizing Statement

Of the eight "continuation criteria," the situation at the end of 1974 was: (1) Scott had an active IIC; (2) Scott had differentiated staff functions; (3) Scott was fully unitized; (4) the level of cooperation among unit teachers as a team was high; (5) the level of commitment by teachers was high; (6) students were multi-aged in all but one unit; (7) IPM was followed to a large degree in WDRSD; and (8) the level of open communications within teams was high, but not between teams.

In terms of key factors in the phase of implementation, (1) the level of external support available was high at Scott; (2) the principal, unit leaders, and unit teachers called upon external resources for continued inservice; and (3) the school made appropriate

modifications to the IGE program.

In general, Scott Elementary School was successful in the phases of mobilization, implementation, and institutionalization of MUSE/IPM between 1971 and 1975, although district requirements presented many difficulties in achieving non-gradedness and the school still had problems unsolved. Scott resembles much of the ideal MUSE/IPM. However, regarding multi-age grouping, the primary grades unit, Unit G, became very frustrated with both the concept and the practice because the children were subjected to excessive movement and exposure to many different teachers and aides (Klenke, 1975, p. 133). Regarding non-gradedness, 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 gradedness, though “district reports, tests, and grade level objectives” seemed key. 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.

In sum, Scott Elementary School had received “broad-based support” during the phase of mobilization and achieved “mutual adaptation” between the reform (MUSE/IPM) and the school during the phase of implementation. “Institutionalized change” followed, with respect to shared decision-making, differentiated staffing, team teaching, instructional programming, continued progress, criterion-referenced assessment, and pre-assessment. However, “limited or failed institutionalization” could be seen with some other MUSE/IPM components, particularly multi-aging and non-gradedness.

**Institutionalization of Shared Decision-making, Differentiated Staffing,
Team Teaching, and Partial IPM:
Alys Drive Elementary School, New York**

This third case study, adapted from Melvin (1976), concerns Alys Drive Elementary School, a school that had received “broad-based support” during the phase of mobilization, and where “mutual adaptation” between the reform (MUSE/IPM) and the

school (hybridization) occurred during the phase of implementation. “Institutionalized change” occurred with some components of MUSE/IPM – shared decision-making, differentiated staffing, team teaching, instructional programming, continuous progress, criterion-referenced assessment, and pre-assessment – while “limited or failed institutionalization” was apparent in other MUSE/IPM components like multi-aging and non-gradedness.

In general, Alys Drive Elementary School was successful in the initiation, implementation, and continuation of MUSE/IPM in 1971-76, although district requirements presented many of the difficulties in achieving non-gradedness, student were not multi-aged in all units, and the school still had some problems unsolved. The multiunit organization at Alys Drive School was unique in that it evolved over the five-year period of implementing IGE as changes were made in response to particular situations. There was a strong emphasis on grade level teams which was, in part, the result of adding one grade each year. In the course of doing this, the concept of grade level was reinforced to the point of being a greater consideration than the concept of multi-aging. There was also a strong emphasis on grade levels in the district and the state. Testing programs and many report forms were directed at grade level groups of students. Curriculum guides emphasized content to be learned at each grade level. Also, there was a feeling expressed by some staff members that, although multi-aging had some strengths, these were not sufficient to outweigh the difficulties involved in planning and managing instruction for students at several grade levels. In addition, the kindergartens were not included in the multiunit organization and basically self-contained. Alys Drive teachers did not closely follow the IPM; instead, they adapted and incorporated IPM only as part of their instructional practices.

History and Background

The Alys Drive School was located in a residential neighborhood in Depew, New York. At least 80 percent of the residents lived in single family dwellings, and the remainder lived in apartment complexes. The neighborhood was a lower middle class area and most of the residents were blue collar workers. There were some white collar workers and some families were supported by unemployment or welfare incomes. As one

of six elementary schools in the Lancaster Central School District, New York, Alys Drive Elementary School served more than 550 students in grades K-5. Melvin (1976) identified Alys Drive as best typifying the multiunit school and instructional programming among the 40 IGE schools in New York (pp. 33, 43-44).

From Mobilization To Institutionalization, 1971-75

1971-72. In the spring of 1971, Dr. Hull of the State University College at Fredonia announced plans for a summer workshop focusing on IGE and the Wisconsin Design for Reading Skill Development (WDRSD). Ms. Whittaker, assistant superintendent for instruction in the Lancaster Central Schools, encouraged the staffs of the district elementary schools to consider attending the workshop. The staffs of two schools, Alys Drive and Bowmansville, expressed interest, so four teachers representing the two schools attended the workshop. These teachers returned to Lancaster with positive reports about the possibilities of the IGE system. They recommended that the two schools seek further information about IGE and WDRSD. The district Individualization of Instruction Committee recommended that the district support the two schools in pursuing IGE (Melvin, 1976, p. 45).

Mr. Sciole (the principal of Alys Drive Elementary School), one teacher at Alys Drive, the district curriculum coordinator, and representatives from Bowmansville attended a Principal-Unit Leader Workshop. With the assistance and support of Ms. Whittaker and Mr. Sciole, weekly inservice workshops were planned for the 1971-72 school year. These were attended by the first- and second-grade teachers of Alys Drive and Bowmansville Schools and the reading teacher from Alys Drive. The workshops focused on the components of IGE and on the WDRSD: Word Attack (Melvin, 1976, p. 45). To gain further information about IGE, four teachers traveled to Madison, Wisconsin to attend the State Coordinators meeting in the fall of 1971. The teachers also visited an IGE school in Appleton, Wisconsin (Melvin, 1976, p. 46).

Through the workshops and other meetings in 1971-72, plans were made to use the WDRSD: Word Attack materials in the first and second grades beginning in September, 1972. Two I&R units were organized to include all first- and second-grade students and teachers. These were called Team A and Team B. Each team included both

first- and second-grade students (Melvin, 1976, p. 46).

During the school year 1971-72, the Board of Education was asked to support the implementation of the Wisconsin Design and the multiunit school organization. The Board granted permission to implement these changes for a trial period of five years (Melvin, 1976, p. 46).

1972-73. During the 1972-73 school year, the remedial reading teacher at Alys Drive, Ms. LaCrego, became more involved with the total reading program. As the reading teacher, Ms. LaCrego had been primarily responsible for providing remedial instruction for those students who needed it, and for providing assistance to the classroom teachers at their request (Melvin, 1976, p. 46). After becoming acquainted with the WDRSD materials and procedures, Ms. LaCrego developed a plan for a Reading Center which would serve all students, not just those who needed remedial instruction. The Reading Center would have a specific location in two unoccupied classrooms. The teams that were using WDRSD would schedule instruction in word attack skills at different times of the day. The staff of each team would continue to identify the students to be grouped for instruction on certain skills. Some of these groups would then be assigned to the Reading Center. The students in these groups would go to the Reading Center at the scheduled time for instruction with the reading teacher. Having the reading teacher available as an additional staff member would make it possible to provide instruction in a greater number of skills at any one time as well as decrease the size of the groups (Melvin, 1976, p. 47).

The principal and some staff members participated in workshops and other inservice programs related to IGE throughout the 1972-73 school year. The WDRSD: Word Attack Skills materials were used throughout the year by the two teams which included the first- and second-grade students. At the end of the school year, parents were asked to respond to a questionnaire. Also, the teachers were asked to write their reactions to the first year in the IGE program. Plans were made to implement WDRSD at the third-grade level in the coming year (Melvin, 1976, p. 47).

1973-74. In September, 1973, a new multiunit organization was created to include first-, second-, and third-grade students. There were then three teams. Team A included all the first-grade students. Teams B and C each included second- and third-

grade students. The WDRSD: Word Attack materials were used by all three teams. One teacher on each team had a self-contained room to provide a less diverse setting for those students who had not functioned as well as expected in the situations involving re-grouping among the entire team. Within these self-contained rooms, individualized instructional procedures were used by the classroom teachers (Melvin, 1976, p. 51).

During the 1973-74 school year, leadership and assistance continued to be provided by Ms. Whittaker at the district level and by Mr. Sciole within the school. Some teachers attended workshops; inservice programs were held in the district (Melvin, 1976, p. 51). By this time, additional support for IGE schools was being provided by the Board of Cooperative Educational Services (BOCES), First Supervisory District, Erie County – one of the regional education agencies in New York. Each BOCES had a director for Optional Educational Programs (OEP). IGE was one of the optional educational programs in the state. Thus, the OEP director in each BOCES office served as a consultant for the IGE schools in that region (Melvin, 1976, p. 51). Continuing leadership and support for IGE in New York were also provided by Dr. Hull at Fredonia and Dr. King in the State Department of Education. These two men shared the responsibility for coordinating IGE activities in the state of New York (Melvin, 1976, p. 52).

In response to questions and concerns which were rising about this new system and program, 21 teachers representing the two IGE schools attended a meeting of the Board of Education to explain how the program was functioning (Melvin, 1976, p. 53). Some of the teachers were asked to serve as consultants to schools in other districts. In Lancaster, district policy did not permit teachers to earn fees for consultant services carried out on school time. It was decided that the fees earned in consulting about implementation of IGE or WDRSD would be deposited in a special district fund. This fund was to be used to bring other consultants to the Lancaster District, thus providing additional opportunities for professional growth for the faculties of the IGE schools (Melvin, 1976, p. 53).

By 1973, a Systemwide Policy Committee (SPC) had been formed in the Lancaster School District. The SPC was composed of two persons from the central office and the principals and all unit leaders from the two IGE schools. The SPC did not designate a permanent chairperson. It was decided to share this responsibility by having

the SPC members alternate as chairpersons for the meetings (Melvin, 1976, p. 53).

The staffs of the IGE schools recognized that their instructional programs could be improved if more student teachers were assigned to their schools. The SPC recommended that a brochure be prepared which would provide an overview of the multiunit school and the meaning of IGE. This brochure was then made available to colleges and universities in the area for distribution to those students who were making plans for their student teaching experience. The brochures were sent to the State University of New at Buffalo, Medaille College, Conesius College, and D'Youville College (Melvin, 1976, pp. 53-56). In the same year, Medaille College began the development of a competency-based teacher education program, a change which required that provisions be available for them to send education students into school for observation, participation, and student teaching. The Lancaster School District contacted Medaille to discuss ways in which the institutions could support and assist each other's programs. One of the Alys Drive teachers, Ms. Nemmer, served on the committee at Medaille to develop the competency-based program (Melvin, 1976, p. 56).

Near the end of the school year, the IIC devoted some of its meetings to planning for the following school year. The minutes of their meetings on April 24 and 25, 1974, included: team set-up for 1974-75, giving more consideration to ability of children when assigning them to a unit, and the possibilities of Team C to work with next level to group for reading, math, and spelling. An IIC meeting on May 7, 1974, focused on specifying team structure for 1974-75 (Melvin, 1976, p. 56).

1974-75. A new multiunit organization was created for the 1974-75 school year at Alys Drive as the fourth-grade students and teachers became involved in the IGE organization and in using WDRSD: Word Attack materials. Four teams were organized: Team A included all six-year-olds (first-grade students); Team B included seven- and eight-year-olds (most of the second graders and some third graders); Team C also consisted of seven- and eight-year-olds (some second graders and most of the third-grade students); and Team D was composed of eight- and nine-year-olds (the fourth graders). The inclusion of self-contained individualized classes on Teams A and B was discontinued. The staffs of those teams felt that the children did not need the self-contained atmosphere (Melvin, 1976, p. 57). Instructional programming was expanded to

include WDRSD: Study Skills and instruction in mathematics. The Reading Center continued to function effectively and by this time was considered to be the heart of the school-wide reading program (Melvin, 1976, p. 57).

In 1974, Ms. Whittaker worked with interested persons from other districts to establish a Hub for the IGE schools in western New York. Workshops related to several aspects of IGE were conducted during this school year. Using the money from the consultant fees fund, outside speakers were brought in for workshops which were open to all IGE schools in the Hub. Topics for three of these workshops were WDRSD: Study Skills, Mathematics in IGE Schools, and IGM (Melvin, 1976, p. 58).

Faculty members in the IGE schools and Ms. Whittaker in the central office became increasingly involved in professional IGE activities beyond the district. In June 1974, and June 1975, they organized Principal-Unit Leader Workshops for the Hub schools and other interested persons. In the fall of 1975, they conducted a "One Step Beyond Awareness Workshop" for the Hub schools (Melvin, 1976, p. 58). In the summer of 1975, Ms. Whittaker and Ms. LaCrego conducted a workshop for fourteen of the district's substitute teachers, aimed at helping these teachers understand IGE and the instructional procedures used in the IGE schools (Melvin, 1976, p. 58).

Near the close of the 1974-75 school year, plans were made for reorganizing the multiunit organization for September, 1975. The planning involved including the fifth graders and responding to some of the concerns related to the 1974-75 organization (p. 58). Additional information about the rationale for the 1975-76 multiunit organization was gathered through informal conversations with some teachers. They indicated that consideration was given to: (1) the numbers of students and staff which could be grouped together for an effective team; (2) providing the most effective means or meeting the needs of individual students; (3) assigning teachers who work well together to a team; (4) assigning teachers to teams at their preferred level of instruction (e.g., lower primary, fourth grade, upper intermediate, etc.); (5) assigning students to teams by grade level to provide for grade level instruction in social studies and science; and (6) keeping grade level students together to meet the requests of some of the art, music, and physical education teachers (Melvin, 1976, pp.59-60). Based on the above information and considerations, the regular classroom staff members and all first- through fifth-grade

students were assigned to teams for the 1975-76 school year (Melvin, 1976, p. 60).

1975-76. The IIC was composed of Mr. Sciole, the principal; the five team leaders; Ms. LaCrego, the reading teacher; and Mr. Adamec, representing the special teachers. The members of the SPC were Ms. Whittaker and Mr. Bunting from the district office and the principals and all unit leaders from the two IGE schools in the district (Melvin, 1976, p. 93).

The multiunit organization included five teams (I&R Units). In April, 1976, both Team A and Team B consisted of first and second graders (ages 6, 7, 8); both Team C and Team D were composed of third and fourth graders (ages 8, 9 for Team C and ages 9, 10 for Team D); and Team E included fourth and fifth graders (ages 10, 11) (Melvin, 1976, pp. 90-92). The kindergartens were not included in the multiunit organization. Each kindergarten teacher has a morning session and an afternoon session. The kindergartens were basically self-contained. Ms. Zgoda, the Team A leader, provided instruction in word attack skills for nine kindergarteners who have acquired the necessary readiness skills. This instruction was scheduled for three half-hour periods weekly (Melvin, 1976, p. 93).

The Multi-unit Organization

The school staff did not develop a statement of the rationale for their multiunit organization. Rather, the organization evolved over the five-year period of implementing IGE as changes were made in response to particular situations (Melvin, 1976, p. 169).

There were changes in the multiunit organization each year. These changes were necessary to carry out the school's plan to add one additional grade level to the IGE system each year. Annually, decisions were made as to how the new grade level would be incorporated in the organization. These decisions were based on previous experiences and the attitudes and concerns of the staff members involved. There was a strong emphasis on grade level teams which was, in part, the result of adding one grade each year. In the course of doing this, the concept of grade level was reinforced to the point of being a greater consideration than the concept of multi-aging (Melvin, 1976, p. 170).

There was also a strong emphasis on grade levels in the district and the state. Testing programs and many report forms were directed at grade level groups of students.

Curriculum guides emphasized content to be learned at each grade level. Assigning students by grade levels made it easier to comply with district and state guidelines (Melvin, 1976, p. 170; see also Klenke, 1975, pp. 135, 160, 186-187).

Each year's decision about the multiunit organization was based on the input, suggestions, and concerns of the staff of each team. Insofar as possible, the organization was planned so that teachers could work in the situation in which they felt they could best carry out their responsibilities (Melvin, 1976, p. 171). In the first two years of IGE, the primary students were organized as multi-aged teams; within the teams, multi-aged groups of students were assigned to each homeroom. The students went to special classes (art, music, and physical education) as homeroom groups. Some of the special teachers were not receptive to having the students multi-aged for instruction in their areas. In the following year, the staffs of the multi-aged teams assigned their students to homerooms by grade levels. This resulted from the concerns expressed by some special teachers as well as the uncertainty among the team teachers as to the value of multi-aging within homerooms. The school would again be reorganized for the 1976-1977 school year. Staff members indicated that they expected the plan would include six teams, one for each grade level (Melvin, 1976, pp. 170-171).

Among the staff members of the teams, there were varying opinions and attitudes toward multi-aging. This topic was discussed at meetings and in informal conversations for several years. A need was expressed for more extensive information on the purpose and strengths of multi-aging (Melvin, 1976, p. 170). Also, there was a feeling expressed by some staff members that, although multi-aging had some strengths, these were not sufficient to outweigh the difficulties involved in planning and managing instruction for students at several grade levels (Melvin, 1976, p. 171).

Modification of MUSE

Certain aspects of the models for the multiunit school may be easier to implement than others. At Alys Drive School, the IIC and SPC structures followed the prototypic model closely. Also, the assignment of staff members to appropriate roles in the multiunit organization followed the MUS model closely; however, the assignment of students deviates from the model in respect to multi-aging (Melvin, 1976, p. 190). The prototypic

model for the multiunit school suggested that each team should include 100 to 150 students. In the IGE Implementor's Manual (Evers, Fruth, Heffernan, Karges, and Krupa, 1975), the recommendation was that 75 to 150 students be assigned to each team (Melvin, 1976, p. 172). The major modification of the model for the multiunit school was in the minimal degree of multi-aging within Teams C, D, and E, and in the proposed organization for the 1976-77 school year when each team was expected to include students at a single grade level. The staff at Alys Drive gave consideration to the strengths and weakness of multi-aging during their four years as an IGE school. The topic appeared on agendas during these four years and was also a topic of discussion during the interviews for this study. Multi-aging occurred in the primary teams, but the later trend was toward grade level teams. The emphasis on grade levels was encouraged by district and state curriculum guides and reporting procedures as well as by some of the teachers within the school (See Klenke, 1975, p. 160). There were teachers who supported the concept of multi-aging, but they felt there was a lack of information based on research and practice which could be used to build a strong case for multi-aging (Melvin, 1976, pp. 191-92; see also Klenke, 1975, p. 160).

IPM Instruction, 1974-75

General school-wide objectives, as defined in Step 1 of the IPM, had not been identified at Alys Drive until the fourth year of implementing IGE, 1974-75 (Melvin, 1976, p. 188). The IIC considered the WDRSD: Word Attack Skills, WDRSD: Study Skills, and CAM (Comprehensive Achievement Monitoring) mathematics objectives to be the school-wide educational objectives for reading and mathematics (Melvin, 1976, pp. 172-173). Likewise, the staff used the instructional objectives contained in the adopted curricular materials as their school-wide objectives. Criteria for promoting students reflected the minimal achievements expected of students to be assigned to a higher grade level. The combination of instructional objectives and minimal promotion criteria appeared to be sufficient for an understanding of the general school-wide expectations for student achievement (Melvin, 1976, p. 194).

In relation to Step 1, it might be reasonable to assume that a set of instructional objectives can be substituted for general school-wide objectives. This seems to be a

feasible assumption if the emphasis is on identifying a minimal level of achievement which all students can be expected to attain. However, this would not provide guidelines for expected levels of achievement for the more able students – and these are the students who might benefit most from IGE with its possibilities for providing instruction over a wider range, at a more advanced level, or at a faster pace (Melvin, 1976, p. 194)

The implementation of Steps 2 through 7 of instructional programming follows the model closely when the teams used the WDRSD materials and the suggested guidelines for implementation. This was probably due to two factors: (1) the WDRSD guidelines reflected the IPM; and (2) many staff members first became acquainted with instructional programming through workshops about WDRSD. Staff members used their knowledge of WDRSD to develop instructional programming procedures in comprehension and in mathematics (Melvin, 1976, pp. 194-195).

Several observations about the use of the Instructional Programming Model are noted: (1) The steps are easiest to follow when instructional objectives are stated specifically, as in the word attack and study skills elements of WDRSD; (2) The steps are followed closely when the staff members consider the objectives to be sufficient importance to be isolated for instruction. Teams A, B, C, and D have specific periods of instruction for word attack skills, and Teams D and E have identified procedures to provide specific instruction in study skills (Melvin, 1976, p. 195).

Continuity of instruction. Under the direction of the reading teacher, a set of records for all students in the building was maintained for word attack skills. Continuity, without overlap, was achieved by referring to these records as students were placed into groups for instruction in word attack skills (Melvin, 1976, p. 173). In comprehension, continuity was achieved as the reading teacher worked with the team leaders and staff teachers to identify groups of students with similar instructional needs, to select basal reading materials for them, and to make changes in grouping and materials throughout the year in response to changes in learning rate or style of individual students (Melvin, 1976, p. 173). Continuity of instruction in mathematics resulted from the use of the CAM objectives as the focus for assessment and record keeping. For most students, mathematics instruction was planned around textbook materials at their grade level. A small percentage of students used materials and/or objectives from higher or lower levels.

Most of the CAM objectives were contained in the text materials; teachers planned additional instructional activities for those CAM objectives which were not included in the texts. Informal communication among the staff members along with the records of objectives which were achieved served as the means of assuring continuity of instruction for each student (p. 174). No formal steps were taken to achieve continuity in the other curricular areas. The combination of teaching content by grade levels, keeping records of topics and content, and frequent interaction among teachers within and between teams made it possible to have a continuous program of instruction with a minimum of repetition for individual students (Melvin, 1976, p. 174).

Patterns of Instructional Programming. The patterns of instructional programming reflected decisions made at both the building level and the team level (Melvin, 1976, p. 181). The patterns of instructional programming in word attack, comprehension, and mathematics for Teams A, B, C, and D all reflected common objectives, common level of achievement, and common basic sequence with some variation for individual students. The common objectives and common levels of attainment for all areas in Teams A, B, C, and D resulted from the use of WDRSD: Word Attack Skills, SPED comprehension areas, and CAM mathematics objectives as the focus for instruction and/or assessment. However, the actual expectations of the staff members are not the same for all students. There were several reasons for this apparent contradiction:

1. The objectives were common in that they served as a guide for minimal expectations. Students might have pursued additional activities, especially in comprehension and mathematics, which led to higher achievement or more extensive learning; these were not necessarily reflected as the achievement of additional objectives.
2. The common level of achievement was mastery, defined by a predetermined score, which was also a minimum expectation. Knowledge which exceeded the grade level expectations in comprehension and mathematics was not reflected in the scores for mastery.
3. The common sequence was related to a strong emphasis on small group instruction. As long as instruction occurred in teacher-directed groups, the sequence was controlled by the teacher. Independent student work was encouraged by many teachers, but this mode was not often used for achieving a given set of objectives. Thus, the variations in sequence of instructional activities were not reflected in describing the patterns of instructional programming inasmuch as the patterns dealt with units of instruction or sets of objectives. Most variations in sequence occurred within a unit of instruction rather than across units (Melvin, 1976, pp. 197-198).

It was difficult to consider the pattern of instructional programming in a curricular area (such as comprehension in this study) where instruction was focused on broad areas, and increasingly higher levels of achievement were expected throughout elementary school. Describing the objectives and expected level of achievement as common for all students stated the minimal expectations but did not reflect the variety of additional learning experiences carried out by many students (e.g., extensive independent reading or research on a specific topic) (Melvin, 1976, pp. 198-199).

In Team E, variable objectives were used in study skills. The objectives for individual students reflected different levels of related topics or skills. Team E did not use the SPPED comprehension tests or the CAM mathematics objectives and related tests. The objectives for these areas were derived from the text materials in use. The expected levels of achievement in these areas varied for individual students (Melvin, 1976, pp. 181, 183).

Management. The strategies used for planning and managing instructional programming differed from team to team. Each team had developed procedures which reflect the personal interests and styles of the team members (Melvin, 1976, p. 199; see also Pettit, 1980, p. 248). Effective communication through the IIC served as a means of avoiding problems which could occur when different procedures were used (Melvin, 1976, p. 199).

Some record-keeping procedures were the same for all teams. These included school-wide wall charts for recording achievement in word attack skills; individual records of level of achievement in comprehension; and record forms for achievement of CAM math objectives. Other available record forms, such as the keysort cards for study skills, were used by some teams but not others. In both reading and mathematics, the records were an important source of information for assigning students to groups or identifying objectives for individual students. These records seemed to be sufficient for managing instructional programs (Melvin, 1976, p. 199).

Several teachers expressed concerns about the excessive amount of record keeping which was required. These comments related to some school and district record-keeping forms which were not needed for managing instruction. In some cases, the same information was recorded on more than one form (Melvin, 1976, pp. 199-200).

Keeping records to manage instruction was not necessarily an overwhelming task, but as new or different forms were required for this purpose, a serious effort must have been made to change district and school record-keeping policies to avoid the additional work involved in recording the same information in several ways (p. 200).

The amount of formal team planning which was required in instructional programming appeared to be related to the type of objectives which were being used. Planning for specific objectives such as word attack skills required frequent team discussion about prior achievement, skills to be taught, grouping arrangements, and teacher assignments. Planning for broader objectives, as in comprehension, occurred less frequently; once decisions about levels of instruction and basic groups are reached, regular team planning was no longer required. In informal sessions, the team members kept each other informed and made decisions for changes (Melvin, 1976, p. 200).

Cooperative planning for instructional programming in curricular areas other than reading and mathematics occurred in different ways in each team. Cooperative team planning resulted from a combination of personal interests and informal interactions among team members (Melvin, 1976, p. 200).

Because of the importance of informal interactions among team members, room location were important. The faculty lounge was an important element of IGE at Alys Drive. It was a spacious, pleasant room, and many faculty members spent their break time in the lounge. Much of the lounge conversation was about school-related matters. Many team decisions were made in the lounge, and communications from the IIC or district were often shared and discussed.

The original decision by the Board of Education for a trial period of five years might have made it less threatening for the staff to handle difficulties which occurred in the early stages of implementation than would have been possible if there had been more pressure to “prove” the effectiveness of IGE in a shorter period of time (Melvin, 1976, p. 201).

Summarizing Statement

Of the eight “continuation criteria,” the situation at the end of 1975-1976 was: (1) Ayls Drive had an active IIC; (2) Alys Drive had differentiated staff functions; (3) Alys

Drive was fully unitized; (4) the level of cooperation among unit teachers as a team was high; (5) the level of commitment by teachers was high; (6) students were not multi-aged in all units; (7) IPM was followed to a large degree in WDRSD; and (8) the level of open communications within teams was high, but not between teams.

In terms of key factors in the phase of implementation, (1) the level of external support available was very high at Alys Drive; (2) the principal, unit leaders, and unit teachers called upon external resources for continued inservice; and (3) this school made appropriate modifications to the IGE program.

In general, Alys Drive Elementary School was successful in the initiation, implementation, and continuation of MUSE/IPM in 1971-76, although district requirements presented many of the difficulties in achieving nongradedness and the school still had some other problems unsolved. Most schools like Alys Drive would be classified as true MUSE/IPM schools during 1977-79 when the Center's evaluation was conducted. It is speculated that Scott would remain as a true IGE school that institutionalized IGE even after the evaluation into the 1980s. The multiunit organization at Alys Drive School was unique in that it evolved over the five-year period of implementing IGE as changes were made in response to particular situations. There were changes in the multiunit organization each year to carry out the school's plan to add one additional grade level to the IGE system each year. There was a strong emphasis on grade level teams which was, in part, the result of adding one grade each year. In the course of doing this, the concept of grade level was reinforced to the point of being a greater consideration than the concept of multi-aging. There was also a strong emphasis on grade levels in the district and the state. Testing programs and many report forms were directed at grade level groups of students. Curriculum guides emphasized content to be learned at each grade level. Assigning students by grade levels made it easier to comply with district and state guidelines. In addition, among the staff members of the teams, there were varying opinions and attitudes toward multi-aging. During discussions at meetings and in informal conversations for several years, a need was expressed for more extensive information on the purpose and strengths of multi-aging (Melvin, 1976, p. 170). Also, there was a feeling expressed by some staff members that, although multi-aging had some strengths, these were not sufficient to outweigh the difficulties involved in planning and

managing instruction for students at several grade levels. In addition, the kindergartens were not included in the multiunit organization. The kindergartens were basically self-contained. In regard to IPM at Alys Drive School, the teachers did not closely follow the model; instead, they adapted IPM and incorporated IPM only as part of their instructional practices.

In sum, at Alys Drive Elementary School, “broad-based support” characterized the phase of mobilization, “mutual adaptation” between the reform (MUSE/IPM) and the school or hybridization occurred during the phase of implementation. Here, “institutionalized change” occurred with some components of MUSE/IPM – shared decision-making, differentiated staffing, team teaching, instructional programming, continuous progress, criterion-referenced assessment, and pre-assessment – while “limited or failed institutionalization” was apparent in other MUSE/IPM components like multi-aging and non-gradedness.

Chapter Summary

As shown in the three case studies above, these true IGE schools showed a variety of combinations of such general key factors as: (1) joint decision between the principal and staff, need for a change on the part of staff, staff being ready for a change, and adequate resources in the phase of mobilization; and (2) sufficient staff development, change in role relationship and shared decision-making, and strong district support in the phase of implementation; (3) continued external support, continued inservice for the new and old staff, and creative modification of the IGE program in the phase of institutionalization.

In these schools, constraints such as district policies and requirements, perceived community norms, established teaching practices, different philosophies of teaching and multi-aged grouping for instruction, different teacher personalities and attitudes, and a need for standardization led local schools to alter the reform at the same time that they implemented MUSE/IPM. Said differently, unique constraints prevented these schools from being reformed by MUSE/IPM. Thus, MUSE/IPM, like other reform programs, ended up failing to entirely replace the grammar of schooling; in other words, the grammar of schooling persisted despite determined efforts to replace it. Also, like other

reform programs, MUSE/IPM showed a history of mutual interaction (hybridization or adaptation) between the reform and the school, which in turn led to either “limited/failed institutionalization” or “institutionalized change.”

Chapter 8

The Nation-wide Continuation of Multi-unit School-Elementary and the Instructional Programming Model, 1974-1981

Case studies of Rocky Mountain Elementary, Scott Elementary, and Alys Drive Elementary Schools have established that different types of “mutual adaptation” occurred during the phase of institutionalization, which led to either “limited or failed institutionalization” or “institutionalized change.” “How typical were these instances of what was happening elsewhere in the nation with respect to the *content* and *process* of institutionalization?” is the question to be addressed in this chapter. This chapter offers a snapshot of the degree of nationwide continuation of seven components of IGE, followed by exploration of the central aspects of MUSE/IPM – the *contents* of IGE change – with respect to their degrees of continuation. These *contents* include: the Instructional Improvement Committee and decisional participation, multi-unit organization, staff development, IGE subjects and IPM instruction. Then, this description of the contents of IGE change will be followed by exploration of key *process* factors of IGE change in institutionalization phase.

Much of the following description is based on the results of a four-phase evaluation study by the R&D Center, 1976-79. Phase I was a large sample study (N=159) to provide basic information about IGE schooling. This Phase I study used structural equations to simultaneously examine relationships among the variables believed to influence means of instruction, staff outcomes, and pupil outcomes (Romberg, 1985, p. 46). Phase II site visits to 30 IGE schools (15 high implementation schools and 15 low implementation schools) in 1978 were planned to verify the self-report data gathered in Phase I as well as to gather more data on additional variables that determined the processes of schooling. As a verification activity, a subcontract was made with the Research Triangle Institute (RTI). The principal investigator of Phase II was Roderick A. Ironside of RTI’s Center for Educational Research and Evaluation. Phase III was an in-depth field study conducted in six schools, five of which had also participated in Phase I. One or more IGE regional coordinators or researchers reported these six schools to be exemplary IGE schools. Phase IV centered on the use and effectiveness of the three

primary curricular products developed at the Center: the Wisconsin Design for Reading Skills Development (WDRSD), Developing Mathematical Processes (DMP), and the Pre-Reading Skills Program (PRS) (Romberg, 1985, pp. 46-47).

National Snapshot of MUSE/IPM Continuation

IGE Schools Questionnaire, Spring 1976

As a preliminary step to Phase I, a brief IGE School Questionnaire was first sent out to all IGE schools that had direct contact with the Center in Spring 1976 (1,426 schools). The questionnaire was sent again to the schools in Spring 1977 and again to the actual Phase I sample in Fall 1977. Of the 1,426 IGE Schools Questionnaires sent out to principals of schools in 27 states, nearly 74% (1,049) were returned before June 30, 1976 (Romberg & Stewart, 1985).

When principals were asked whether they considered their school to be an IGE school, just over 90% of the respondents (N=946) said they did. Of the remaining 103 schools, nine principals reported never having been IGE schools, and 94 reported no longer being IGE schools. Principals who said their schools were no longer IGE gave their reasons for dropping the IGE program. Some 17% of the schools reported that lack of support at the school board/district level had caused them to leave IGE and 16% of the schools dropped IGE due to lack of faculty support. Another 4% cited the absence of administrative or community support and 5% of these schools abandoned IGE because of implementation problems (Romberg and Stewart, 1985, p. 58).

Regarding the agency in which their school's involvement in IGE originated, one-third of the 946 schools said the originating agency was the Wisconsin R&D Center, another 29% said the /I/D/E/A/, while 19% said both of these. The remaining 19% responded that it was another agency, or they didn't know, or left the question unanswered. Concerning whether or not a school affiliated with any other IGE schools in the same school system or with IGE schools outside their school system in Networks, Leagues, or other such groups, of the 685 schools that had other schools in their systems, 92% maintained affiliations outside their own building regarding IGE (Romberg and Stewart, 1985, p. 59).

Based on observations, judgments, and study of materials, Phase II site visits to 30 schools (15 high implementation schools and 15 low implementation schools) displayed a somewhat different picture of IGE implementation from that derived from the Phase I self-response to IGE Schools Questionnaire. Of these 30 schools, 20 (67%) were considered to be IGE schools, six (20%) were marginal IGE schools, and four were not considered to be IGE schools. Further, of the 30 schools, only nine schools (30%) used/approached IGE either “comprehensively” (seven schools or 23%) or “with creative adaptation” (two schools or 7%), while 21 schools (70%) used/approached IGE either “symbolically” (eight schools or 27%) or “mechanically” (13 schools or 43%) (Ironside & Conaway, 1979, pp. 137-166). In other words, Phase II determined that two-thirds were IGE, and of these 20, only nine were actually doing IGE.

Regarding background of affiliation with agency, seven schools (23%) of 30 were considered to have substantial R&D Center background and five schools (17%) were considered to have R&D Center background to some extent; however, 13 schools (43%) had little and five schools (17%) had no background. Of these 30 schools, the network (all levels) was a valued resource in six schools (20%) and it was a valued resource to some extent in ten schools (33%); however, it was rarely a valued resource in nine schools (30%) and not a valued resource in five schools (17%). (Ironside & Conaway, 1979, pp. 137-166).

IGE Implementation Survey, Spring and Fall 1977

The Center developed and distributed an IGE Implementation Survey to obtain more information about the level of IGE implementation nationally. This instrument consisted of 77 questions describing IGE outcomes, organizational matters, and processes that were divided into seven groups, one for each of the components of IGE. The analysis of responses to the instrument provided the Center evaluation team with a percentage implementation score for each subscale and the total. To categorize percentage implementation scores, the team defined those between 75% and 100% as indicating actual or true IGE schools, those between 50% and 75% as indicating schools marginally IGE, and those below 50% as indicating schools IGE in name only (Romberg & Stewart, 1985, p. 67).

When a single school response was requested of the IIC in each building in Spring 1977, 374 schools returned completed forms. The mean percent implementation scores for these schools for seven IGE components are shown in Table 8.1. The mean scores for subscales ranged from 52.58 to 70.77, while the mean for the total IGE system was 60.77. Thus, on the average, schools were marginally IGE (Romberg & Stewart, 1985, p. 66).

Table 8.1
Spring 1977 Percentage Implementation Scores from the IGE Implementation Survey
(N=374 schools, one response per school)

Component	No. Items	Mean	sd
1. MUS	18	62.41	14.40
2. IPM	14	64.71	16.01
3. Curriculum	8	70.77	16.02
4. Evaluation	9	61.22	17.60
5. H-S-C Rel	9	57.76	15.54
6. Fac. Env.	15	52.58	16.68
7. R&D	4	56.07	18.87
All concepts	77	60.77	12.50

Source: from *To Be, or Not To Be, IGE*, by T. A. Romberg and D. M. Stewart. In *Toward Effective Schooling* (p. 68), by T. A. Romberg (Ed.), 1985, Lanham, MD: University Press of America.

In Fall 1977, the IGE Implementation Survey was sent out as part of the General Staff Questionnaires to be filled out by each professional staff member in the Phase I schools (N=159). Thus, there were several responses rather than a single response from a school. To obtain an average school score for MUSE, for example, the ratings of all staff for the 18 items were summed and then divided by the number of staff responding. The average implementation scores for subscales ranged from 45.2 to 62.8, while the mean for the total IGE system was 53.6, as shown in Table 8.2. These scores were from 7-10 percentage points lower than scores obtained in Spring 1977. Based on these data, on the average, schools again were deemed marginally IGE (Romberg & Stewart, 1985, p. 67).

The Instructional Improvement Committee and Decisional Participation

This section describes the establishment and operations (functions) of the IIC and decisional participation in the IIC with respect to the degree of implementation of the IIC based on the prototypic model.

Table 8.2
Phase I Percentage Implementation Scores from the IGE Implementation Survey
(159 schools, multiple responses per school)

Component	No. of Items	Mean	sd	Lower Score	Highest Score
1. MUS	18	55.8	14.3	14.2	96.3
2. IPM	14	57.8	13.9	10.2	96.8
3. Curriculum	8	62.8	13.3	27.5	99.0
4. Evaluation	9	55.3	14.6	18.9	93.7
5. H-S-C Rel	9	49.7	13.4	17.3	93.2
6. Fac. Env.	15	45.2	15.9	9.2	93.7
7. R&D	4	47.9	15.8	7.8	94.9
Total	77	53.6	12.8	18.5	92.7

Source: from *To Be, or Not To Be, IGE*, by T. A. Romberg and D. M. Stewart. In *Toward Effective Schooling* (p. 68), by T. A. Romberg (Ed.), 1985, Lanham, MD: University Press of America.

The Center evaluation study (Romberg & Stewart, 1985; Ironside & Conway, 1979) pointed out that the IIC was established in most of the IGE schools. When IGE Schools Questionnaire was sent out in Spring 1976, the question of whether each IGE school had an IIC received a positive response from 92% of the 946 schools (N=871). The most common reply to the question of how frequently this group met was “once a week” (Romberg & Stewart, 1985, p. 61). Phase II site visits to 30 schools (15 high implementation schools and 15 low implementation schools) showed that of these 30 schools, 24 schools (80%) had an IIC and one school (3%) had one similar to IIC; however, five schools (17%) did not have an IIC. The IIC was the school-wide decision-making body in eight schools (27%) and to some extent in six schools (20%); however, the IIC was rarely the school-wide decision-making body in eight schools (27%) and not the school-wide decision-making body in five schools (17%) (Ironside & Conway, 1979, pp. 137-166). In short, the majority of IGE schools established the IIC as the school-wide decision-making body.

George Reid (1974) also reported that some 96.6 per cent of the survey schools (N=81) from 18 states relied upon a curriculum coordinating committee (equivalent to IIC) or another similar group to share periodically in the decision-making process, indicating that shared decision-making was widespread in schools where IGE was being implemented, as displayed in Table 8.3 (Reid, 1974, pp. 89-90).

Table 8.3
Degree of Shared Decision-Making In The Instructional Program

Degree of Shared Decision-Making	Number of Respondents	Percentage of Respondents
Never	0	0.0
Rarely	1	1.2
Seldom	2	2.2
Frequently	30	35.9
Most of the time	51	60.7
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

Moyle (1977) observed that the IICs used shared decision-making processes to some degree and performed vital and important functions related to the instructional program. In the eight schools studied,¹ however, the membership, modes of operation, and functions performed by the IIC differed substantially from the prototypic organizational model and varied considerably from school to school. Reasons for this were: “the policy mandates of the district office, and the size of the school, the managerial requirements unique to each school, the willingness of principals to involve other members in decision making, the nature of the principal’s leadership, the degree of commitment of the staff to the philosophy and principles of IGE – particularly to the refinement and renewal phases of its implementation, the effectiveness of the communication channels within the schools” (Moyle, 1977, pp. 221-222).

In addition, recurrent alteration in membership of the IICs was dysfunctional to their operation. Further, surrogate members, members by rotation, and newly appointed unit leaders did not adequately perform their functions of representation and participation in decision making (Moyle, 1977). Group solidarity increased in IICs when there were open two-way communication channels, when members were content with the decision-making processes, when unit leaders carried out their representation function effectively, and when personalities and educational philosophies were in agreement (Moyle, 1977, p. 223; see also Pellegrin, 1970b; and Smith, 1972).

Moyle (1977) noted that an open, two-way, whole interaction style characterized communication in the IIC. Relevant agenda items, honesty in participation by all members of the IIC, well-timed intervention by the principal to make decisions by

¹ Two schools in West, three in Midwest, one in Midsouth, and two in East.

consensus, and precisely recorded and reported decisions enhanced communication. Excessively large IICs, imprecise or biased reporting by unit leaders of decisions made in the IIC, and weak two-way communication links among unit leaders which resulted in units being inclined to become schools-within-the-school, tended to obstruct communication (Moyle, 1977, p. 223).

Task structuring of agenda items – prevalent in most IICs – augmented as the issues involved became more complex, or as principals recognized the need to control the consequences of decisions for which they were finally responsible while still judiciously involving IIC members. The task structuring of principals to affect decision consequences was perceived as less than ideal by other school personnel (Moyle, 1977, p. 224). Likewise, Wright (1976) found that teachers perceived IGE principals to be making more influential decisions than was the ideal.

Shared decision-making processes differed from school to school depending upon the willingness of principals to embrace other members in decision making, the extent of the principals' participative behavior, the unit leaders' cognizance of and devotion to the philosophy of IGE, and the effectiveness of the communication channels within the schools. The decision-making process evolved by each IIC in Moyle's (1977) eight schools, however, was acceptable to most staff members, despite their perceptions that they had somewhat low impact on the actual decision made – a perception also found by Nerlinger (1975) and Wright (1976) especially in decisions of extra-school scope. Conspicuous patterns were generally not evident in the shared decision-making processes employed. The process most frequently observed was that members quite quickly reached consensus on the major aspects of an issue, but spent substantial time deliberating alternative solutions and matters of detail. Occasionally compromises were made among these alternative solutions; and sometimes compromises were reached by particular members. On a number of issues, however, the actual decisions made were not completely clear, and their evaluation received inadequate consideration (Moyle, 1977, pp. 224-225).

The leadership behavior of the principal was a significant factor in the functioning of the IIC. When principals were able to maintain a proper equilibrium between

instrumental and participative leadership styles², effectiveness of decision making in the IICs was heightened. Vital instrumental behaviors involved: “attention to agendas and meeting procedures, capacity to distinguish between areas of decision-making responsibility, and the ability to bring discussions to closure” (Moyle, 1976, p. 224). Participative leader behavior included “willingness to listen to and work with IIC members” (Moyle, 1976, p. 224). In a similar study, Smith (1972) also concluded that IIC effectiveness was heightened if the principal did not dominate the other members.

Understandably, unit leaders who were devoted to the concept of IGE and who sufficiently prepared to discuss and defend in the IIC issues of interest to their unit members were effectively carrying out their representation function (Moyle, 1977). The effectiveness of the unit leader’s representation function in the IIC was heightened by “both the principal’s support school-wide, and by the principal’s awareness, understanding, and amelioration of the “administrator-teacher” inter-role conflict found to be experienced by many unit leaders” (Moyle, 1977, p. 222). The effectiveness of the unit leader’s representation function also strengthened the solidarity of the IIC by promoting the horizontal and vertical, two-way communication (Moyle, 1977, p. 222; see also Pellegrin, 1970b; Smith, 1972; and Sheridan, 1974).

Wright (1976) conducted a study of decision structure and decisional participation in 77 IGE schools in 13 states as perceived by 1266 teachers and unit leaders. Wright (1976) reported that the decision making role of the IIC listed in the IGE literature had not been carried out in a great majority of IGE schools. Some 42.4% of the teachers nominated school level structures as making the ultimate decisions of school-wide scope. Only 11.5% of the teachers indicated the IIC, however, while 23.3% nominated the principal and 7.6% nominated the whole faculty as a group (Wright, 1976, p. 68).

Wright (1976) also observed that the average score of teacher’s perceptions of their level of involvement in making influential decisions of school-wide scope was 3.06, very close to the “some involvement” level of 3.0 on the scale. Teachers perceived

² Instrumental leadership is that behavior which defines roles and relationships, stresses rules and regulations, schedules work to be done, stresses standards of performance, and explains why tasks should be done (Moyle, 1976, p. 135). Participative leadership is demonstrated by behaviors which include working directly with others, listening to what subordinates say, asking for suggestions, and involving others in making decisions (Moyle, 1976, p. 140).

themselves to have great involvement in the decision-making process on two items of the school-wide scope; “the nature and duration of specific instructional activities” and “the methods used to modify student conduct.” Teachers perceived themselves to be little involved on two items of school-wide scale; “the criteria to be utilized in evaluating the effectiveness of IGE within a school” and “the changes to be made in the school-wide organizational pattern” (pp. 77-78).

Table 8.4 summarizes the findings on the level of IIC functions in guiding instructional program, based on interview content and overall observation by Phase II site visit team. The first three categories (15 schools) illustrate decreasing but positive degrees of IIC guidance and “control,” although there still may be consistent cooperative planning involved. All other categories (15 school) elucidate minimal to zero planning and guidance of the school-wide instructional program (Ironsides & Conaway, 1979, p. 47).

Table 8.4
IIC Functions In Guiding Instructional Program

	Schools
Overall, IIC plans/coordinates instructional program in integrated way, and units adhere to plans	4
Overall, , IIC plans/coordinates in general way, and units work within that guidance and/or make more specific plans	5
Overall, IIC plans/coordinates in general way, and units have option to follow the plan	6
Overall, IIC plans/coordinates in minimal way	2
Overall, IIC does not plan/coordinate instructional program	5
UN	3
NA (there is no IIC)	5

Source: from IGE Evaluation, Phase II—On-site Evaluation and Descriptive Study: Final Report (Tech. Rep., No 499; p. 47), by R. A. Ironsides, and L. Conaway, L., 1979, Madison, WI: Wisconsin Research and Development Center for Individualized Schooling.

In sum, this collection of data suggests that the membership, modes of operation, and functions performed by the IIC were substantially different from the prototypic multi-unit organization model and varied from school to school during the phase of continuation, 1974-1981. The principal was still the major decision maker in most of the managerial and curricular domains; thus, unit leaders and teachers felt lack of involvement in decision-making during this phase of continuation. The style of decision-making was dominated by a unilateral style over consensual or delegating styles. Thus,

the goal of sharing decision making was still only moderately achieved during the phase of continuation, falling far short of the criteria that the developers of the prototypic multi-unit model set forth.

Multi-unit Organization

This section describes the degree of the multi-unit organization in IGE schools nationwide. It reviews the data from the IGE Schools Questionnaire (Romberg & Stewart, 1985), observations of 30 schools visited (Ironside & Conaway, 1979), and surveys (Reid, 1974; Wright, 1976).

The third section of the IGE Schools Questionnaire dealt with organization and instruction in IGE schools. Of the 946 schools, 550 (or 58%) had unitized their entire pupil population. Of the 550 schools with all pupils in units, 415 had all units multi-aged. This was 75% of the 550 fully unitized schools and 44% of the total 946 IGE schools. Of the 946 schools, 711 (75%) had all units multi-aged. An additional 133 (14%) had some of their units multi-aged, while 55 (6%) had no multi-aged units (Romberg & Stewart, 1985, pp. 59-60). No typical unit structure was found; instead, so many alternative arrangements of pupils in units were reported. For example, the 159 K-6 schools who had organized all pupils into multi-aged units had from one to seven units in 52 different arrangements (Romberg & Stewart, 1985, p. 61).

Phase II site visits to 30 schools (15 high implementation schools and 15 low implementation schools) showed that of these 30 schools, 22 schools (73%) were fully unitized in organization and five schools (17%) were less than fully unitized. Of these 30 schools, only two (7%) were fully unitized in instruction and 18 (60%) somewhat fully unitized in instruction; however, four schools (13%) were rarely fully unitized in instruction. Of these 30 schools, all units were multi-aged in organization in 21 schools (70%) and somewhat multi-aged in organization in six schools (20%) (Ironside & Conaway, 1979, p. 137-166). However, all units were multi-aged in instruction in only three schools (10%) and to some extent units were multi-aged in instruction in 13 schools (43%) (Ironside & Conaway, 1979, p. 137-166).

Reid (1974) found that a large majority (71 of 84 or 84.6%) of the elementary school principals in his study reported that they had implemented multi-age grouping, as

is evidenced by the data in Table 8.5. It is of note, however, that four principals had not implemented multi-age grouping and five others had discontinued its use (Reid, 1974, pp. 85-86).

Table 8.5
Implementation of Multi-Age Grouping In the Survey Schools

Multi-Age Grouping Implemented?	Number of Respondents	Percentage of Respondents
Yes	71	84.6
No	4	4.7
Formerly attempted, but discontinued	5	5.9
Planned for future implementation	3	3.5
Other*	1	1.3
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

* One elementary school principal respondent reported that multi-age grouping had been discontinued only in grades K-2.

Data in table 8.6 are indicative of a fairly strong tendency toward difficulty in the implementation of multi-age grouping. Although only three responding principals classified this grouping as extremely difficult, over one-third (29 of 84 or 34.5%) of all the elementary school principal respondents classified this process as being somewhat difficult (Reid, 1974, p. 87). Only six principals (or 7.3%) reported that this process was very easy (Reid, 1974).

Table 8.6
Degrees of Difficulty In Implementation of Multi-Age Grouping

Degree of Difficulty	Number of Respondents	Percentage of Respondents
Extremely difficult	3	3.4
Somewhat difficult	29	34.5
Average	26	30.9
Rather easy	15	18.0
Very easy	6	7.3
Not applicable	4	4.7
Other*	1	1.2
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

* One elementary school principal preferred to classify his school's implementation as limited overlap or combination classes rather than multi-age grouping.

Reid (1974) also found that the organization of teaching teams was at a very high level of implementation as shown in Table 8.7. A total of 91.8 per cent of the principals (N=77) indicated that over 75 per cent of their staffs had been organized into team situations. In four schools, between 51% and 75% of the staff had been on a team while less than 50% of the staff was working as a team in three schools (Reid, 1974, p. 81).

Table 8.7
Percentage of School Staffs Organized Into Teaching Teams

Organized into Teaching Teams	Number of Respondents	Percentage of Respondents
Below 10%	0	0.0
Between 11% and 25%	1	1.2
Between 26% and 50%	2	2.3
Between 51% and 75%	4	4.7
Over 75%	77	91.8
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

The data in Table 8.8 disclose a somewhat normal frequency distribution, with a slight tendency toward easy implementation of team teaching. Only one elementary school principal testified that this task was extremely difficult, while eleven responded that it was a very easy task (pp. 84-85). The majority (70 or 83.4%) fell in the three categories: somewhat difficult (20 or 23.8%), average (32 or 38.1%) and rather easy (18 or 21.5%).

Table 8.8
Degrees of Difficulty In Implementation of Team Teaching

Degree of Difficulty	Number of Respondents	Percentage of Respondents
Extremely difficult	1	1.2
Somewhat difficult	20	23.8
Average	32	38.1
Rather easy	18	21.5
Very easy	11	13.0
Not applicable	1	1.2
Other*	1	1.2
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

* One respondent inserted the remark that the degree of difficulty for implementation of team teaching varied with each staff member.

Phase II study teams found that in more than half the schools, there was strong evidence of cooperative planning regarding the instructional program at the unit level. In most of these schools, cooperative planning was evidenced in instructional management, staff differentiation, and providing for continuous student progress. In the remainder, staff differentiation appeared more firmly entrenched than did continuous progress (Ironside & Conaway, 1979, p. 46).

In about one-third of the schools there was some evidence of cooperative planning at the unit level, with little or no leadership and coordination across the units. In some of these schools, a moderate level of cooperative planning took place in all units, while in others it appeared in only some units (Ironside & Conaway, 1979, p. 46).

Phase II study's validation task also related to cooperative planning. Phase II examined the specific school-wide instructional objectives (SSIO) in reading and language arts to verify Phase I reports as to source and use of SSIO. It was revealed that in some schools, specific school-wide instructional objectives existed but not continually employed, and also that in other schools without SSIO, certain units have filled the gap on their own at least to some extent. Both cases implied a limited extent of instructional planning at the school level, although the data for this question were gathered from a specified set of 18 of 30 schools (Ironside & Conaway, 1979, pp. 30, 49).

Another aspect that related to cooperative planning was staff involvement in developing, adopting, or adapting school-wide instructional objectives for reading and/or language arts (Ironside & Conaway, 1979, p. 48). As disclosed in Table 8.9, the total staff

Table 8.9
Staff Participation in Developing/Adopting School-wide Objectives

	Schools
01 Full involvement in process, total staff	8
02 Full involvement in process, committee	3
03 Review by total staff or committee	2
04 All work done by/in units	4
05 All work done by IIC	2
06 Dictated by district/diocese	4
NA (no schoolwide objectives reported)	3
UN	4

Source: from IGE Evaluation, Phase II—On-site Evaluation and Descriptive Study: Final Report (Tech. Rep., No 499; p. 48), by R. A. Ironside, and L. Conaway, L., 1979, Madison, WI: Wisconsin Research and Development Center for Individualized Schooling.

fully participated in only eight schools (26.7%) and there were lesser amounts in all other schools (Ironsides & Conaway, 1979, p. 48).

Of the 922 schools who responded to questions concerning the use of aides in IGE Schools Questionnaire, 893 (97%) had aides to some extent: 65% of the 922 schools used both paid and volunteer aides, while 23% had only paid aides and 9% had only volunteer aides (Romberg & Stewart, 1985, p. 60). Of 927 schools who reported whether they had student teachers or interns during both spring 1976 and fall 1975, 687 schools (or 74%) had participated in preservice teacher education (Romberg & Stewart, 1985, p. 61).

Eighty-four percent (N=795) of the 946 schools responding to the IGE Schools Questionnaire reported that all their units had weekly planning meetings, 6% (N=57) responded that some of their units did, and another 6% answered that none of their units had these meetings. Unit staff members were provided with release time so that they could plan together during the school day in 690 (73%) schools. Two or more hours of release time each week was provided in slightly more than two-thirds of these schools that had release time. Of the 946 schools, 92% (N=869) provided a positive response to the question of whether each IGE school had unit leaders. It was the school's policy to rotate the unit leader position in 246 (26%) schools, while 643 (68%) schools reported it was not (Romberg & Stewart, 1985, p. 61).

Wright (1976) disclosed that unit teachers as a group were perceived by 44.6% of the teachers to make the ultimate decisions of unit and subunit scale, and individual teachers were perceived by 14.9% to make the ultimate decisions. Moreover, 6.7% perceived unit leaders to make the ultimate decisions of unit and subunit scope. Hence, unit level decision structures were perceived by 65.2% of the teachers as responsible for making the ultimate decisions of unit and subunit scale (Wright, 1976, p. 63).

Wright (1976) also reported that the average score standing for teachers' perceptions of their level of involvement in the decision-making process used to make decisions of unit and subunit scope was 3.76, indicating a moderately high level of involvement, on a 5 point Likert scale, where "1" represented "very little involvement" and "5" represented "very much involvement." The highest level of involvement was perceived on two items, "the groupings to be utilized for instruction (one-to-one, small group etc.)" and "The procedures to be utilized in pre-assessing an individual student's

level of achievement, learning style, and level of motivation” (Wright, 1976, p. 74).

In sum, about 58% of 946 schools had fully unitized their entire student population and about 44% of 946 had all units multi-aged as of 1977. However, instruction directed to multi-age groups was carried out in less than half of the units. In more than 70% of the total IGE schools the staffs had been organized into teams, and the unit leader and teachers made the majority of decisions of unit and subunit scope. However, the level of cooperative planning remained low. Moreover, the variations in multi-aged organization and multi-aged instruction indicate not only that the prototypic model of multi-unit organization was not implemented and continued to the high degree that the R&D Center envisioned, but also that a number of IGE schools coopted the program or adapted the prototypic model of multi-unit organization to local settings.

Staff Development

Phase II site visits to 30 schools (15 high implementation schools and 15 low implementation schools) by RTI staff showed that of these, 23 schools (77%) had IGE inservice for new staff and three schools (9%) had it to some extent; however, one school (3%) rarely had it and three schools (9%) had no inservice for new staff (Ironsides & Conaway, 1979, p. 137-166).

Table 8.10 data reveal that 59.4 per cent (N=50) of the survey schools in Reid’s (1974) study had an inservice program in operation that was personalized and directed toward the instructional program. An additional 29.9 per cent, or 25 schools, were apparently moving in that direction also, while only 10.7 per cent of the schools (N=9) failed to provide this type of inservice training (pp. 92-93).

Table 8.10
Effectiveness Personalized Inservice Programs for Implementation of Instructional Programs

Existence of Personalized Inservice Program	Number of Respondents	Percentage of Respondents
No	9	10.7
Some needs have been met	25	29.9
Most needs have been met	23	27.3
Yes	27	32.1
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

During spring of 1974, Ciotti (1974) conducted a study of 148 teachers and 24 school personnel working in non-teaching capacities such as principal, counselor, aide, secretary etc. from fourteen Beta League IGE/MUS-E schools in Northern Colorado using a questionnaire and later interviews. These personnel gave perceptions of such aspects of staff development as long-range planning, staff involvement, understanding of goals and objectives, individualization, open atmosphere, problem solving techniques, communication, understanding of self and others, and relevant how-to-do-it skills. These perceptions were compared with desired medians of acceptability which building principals established to determine what aspects of staff development were successfully achieved by 80% of the respondents (Ciotti, 1974, pp. iv, 181-185).

Some individual schools were successful on some aspects of staff development as measured by the questionnaire; however, on no item did 80% of the respondents attain the desired median established by principals. Scores ranged from the level of 70% achievement to a low of only 18%. Less than 50 % of the respondents achieved at or above the desired standard on almost two-thirds of the questionnaire items (Ciotti, 1974, pp. iv-v). On only thirteen of the thirty-three items did at least 50% of the participants score at the desired median. Only on long range planning and on understanding of goals and objectives did respondents reach or exceed the 70% mark. The aspect of communication skills was especially low, while “how-to-do-it” skills were some of the strongest areas, with generally over 50% of the respondents meeting the criterion (Ciotti, 1974, p. 72). Thus, Ciotti (1974) observed that staff development in Northern Colorado IGE schools had not been successful as perceived by educators responding to the survey (p. 72).

During the follow-up interview teachers not only provided positive answers, but also disclosed both concern and discontent, and made several suggestions for improving staff development (Ciotti, 1974, p. v). The responses varied in large part according to the length of time a school had been involved in IGE. Many of the teachers agreed that during the first year of IGE participation, there had been an enormous amount of staff development and specific IGE training, but it continuously dropped each succeeding year. The investigator Ciotti often noticed that schools that had been in IGE for three or more years often had two discrete groups: ““Insiders” or those who had been with the

school since the inception of IGE and “Outsiders” or those who had not” (p. 74). Not only was training different between these groups but there was often strong resentment toward both “haves” and “have nots” which tended to divide the staff. Working relationships were often constrained. “They don’t know what it’s really like. We worked hard to build this” was the typical comment of the “Insiders.” “Somehow they think they are better because of that training they had. Who do they think they are anyway?” was the response of “Outsiders”(Ciotti, 1974, pp. 74-75).

The most significant aspects of staff development as perceived by respondents, Ciotti (1974) observed, were those communication skills that helped them to get along with fellow workers and to work more effectively on their team. In addition, the development of interpersonal relations helped in the building of trust, support and encouragement (Ciotti, 1974, p. 81). Many teachers felt that IGE staff development helped them look at children more as individuals. However, some staff members felt little or no growth resulting from staff development. Also, respondents felt that there was not enough amount of time spent on staff development to be actually effective. Moreover, they felt that districts did not provide financial support for educators’ professional growth (Ciotti, 1974, pp. 80-81). Community understanding, involvement and support of staff development were quite weak areas (Ciotti, 1974, p. 81).

Teachers were, Ciotti (1974) continued, interested in asking “successful IGE’ers” to come to their schools and work with unit members. Similarly, teachers considered visiting other schools and teachers a precious experience. Another interest area related to practical ideas on how to make the program work. Teachers also indicated the need to provide both sufficient financial support and enough time for staff development programs for an IGE school (Ciotti, 1974, pp. 81-82).

In summary, Klausmeier et al. (1971) maintained that the I&R unit was: (1) to engage in continuous inservice staff development activities; and (2) to provide preservice teacher education activities (pp. 20-22). In order to fulfill these functions, the state education agency, teacher education institutions, school districts, and Leagues had to provide the staff of local schools with continued training opportunities for new as well as old staff members. However, the continued staff development in IGE schools, in general, remained at a low level during the IGE continuation phase. The training opportunities

available were called upon by only a small number of committed IGE schools. Due to this lack of continued staff development, coupled with other factors, a number of IGE schools either reduced the scale of the IGE program or discontinued the innovation.

IGE Subjects and IPM Instruction

When the responses of the 550 fully unitized schools were examined to decide which schools used the IPM in the same subject(s) in all units, thereby offering the fullest opportunity for continuous progress in that subject for their students, it was found that 437 (80%) had at least one IPM subject – a subject in which teachers followed the entire sequence of the IPM. Moreover, a number of these schools were providing for continuous progress in more than one subject area. The most prevalent number of IPM subjects was two, reported in 32% of the schools, and the number ranged from zero to six. Reading was the most frequently selected subject, chosen by two-thirds of these schools; math was a very close second (Romberg & Stewart, 1985, p. 60).

When the schools were asked to indicate whether they were using any of the Wisconsin R&D Center's curriculum products, over 50% of the 946 schools indicated having used one or more components of the Wisconsin Design for Reading Skill Development (WDRSD), while 33% (N=313) of the 946 schools were using one or more of the Individually Guided Motivation (IGM) procedures. Pre-Reading Skills (PRS) was used by 11% (N=105) of the 946 schools; it would be more meaningful to present this figure as 14% of the 752 schools who had kindergarten pupils. Finally, 11% (N=105) of the 946 IGE schools used Developing Mathematical Processes (DMP) (Romberg & Stewart, 1985, pp. 61-62).

Phase II site visits to 30 schools showed that 18 (60%) had a school-wide IGE subject and three (10%) did to some extent. Among those schools with IGE subjects, 18 had reading, 15 math, five language arts, two social studies, and two science (Ironsides & Conaway, 1979, pp. 137-166).

Reid (1974) observed an almost unanimous usage of individualized instruction in the schools where the IGE process was implemented, as shown in Table 8.11. It appeared, however, that not all schools had implemented individualization of instruction in all areas or to the same extent (Reid, 1974, pp. 87-88).

Table 8.11
Implementation of Individualization of Instruction

Individualization of Instruction Implemented?	Number of Respondents	Percentage of Respondents
Yes	67	79.8
No	0	0.0
Somewhat	16	19.0
Other*	1	1.2
Total	100.0	

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

* One elementary school principal responded that individualization of instruction had taken place in his school only in the area of reading instruction.

From the data in Table 8.12, it can be interpreted that small-group instruction was quite prevalent amongst the survey schools. While only one of the principals responded that small-group instruction was used “seldom” or “never,” 83.4 per cent of the elementary school principals (N=70) reported that this method of instruction was used “often” or “very frequently” (Reid, 1974, p. 88).

Table 8.12
Utilization of Small-Group Instruction (Less Than Ten Students)

Small-Group Instruction	Number of Respondents	Percentage of Respondents
Never	0	0.0
Seldom	1	1.2
Sometimes	13	15.4
Often	39	46.3
Very frequently	31	37.1
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

The data in Table 8.13 clearly indicate the wide usage of independent study in the IGE schools of this survey. Over half (55.9 per cent) of the survey’s elementary school principals reported that this learning mode was used either “often” or “very frequently.” Only 3.5 per cent of the principals reported that independent study was “never” or “seldom” utilized (Reid, 1974, p. 89).

The first step of the IPM was for the school to state school-wide educational objectives. However, unit staffs, the IIC, and principals explicated that specific school-wide instructional objectives (SSIO) could have diverse meanings and could be drawn from multiple sources (Ironside & Conaway, 1979). Among these were the following:

Table 8.13
Utilization of Independent Study As A Learning Mode

Independent Study Utilized	Number of Respondents	Percentage of Respondents
Never	0	0.0
Seldom	3	3.5
Sometimes	34	40.6
Often	36	42.8
Very frequently	11	13.1
Total	84	100.0

Source: from Administrator Perceptions of the Individually Guided Education Staff Development Process, by G. W. Reid, 1974, Unpublished diss., North Texas State University, TX.

“(a) adoption of objectives inherent in a standardized test; (b) objectives in publisher’s outlines; (c) global statements at the school or district level; (d) different levels of specificity in different subject areas; (e) carefully drawn and sequenced SSIO, sometimes for a grade and sometimes for a range such as K-6” (Ironsides & Conaway, 1979, p. 74). Moreover, Phase II team found that in half the sample (10 of 18 schools) school-wide objectives evidently did not exist for certain subjects as originally reported in Phase I questionnaire.

In addition, according to Phase II teams, many staff members were not conversant in any detail with the IPM, could not use its vocabulary, or suggested that they once had used it but tired of its requirements. Many units employed their own translation of the IPM in a modified or skeptical version (Ironsides & Conaway, 1979, p. 76). The fact that many unit teachers characterized their typical instructional modes as classroom groups within the unit – combined with the finding that a number of “units” existed more as convenient administrative entities than as instructional groupings – suggested a somewhat typical Phase II environment in which it would be difficult for a strong implementation of the IPM to occur (Ironsides & Conaway, 1979, pp. 71-72).

Further, Phase II teams found that a good deal of effort – more previously than at the time of study – had been expended in connection with the IPM component, but with only modest success as a whole (Ironsides & Conaway, 1985, p. 127). Evidently in many schools the classic IPM was altered, or reduced in some way (Ironsides et al., 1979, p. 76). There was substantial proof in Phase II of “partial IPM-ing,” of differences within and across units, of using the full IPM for some students but not others, and of stress on some steps in one curriculum but not another. Many times this somewhat incongruous

approach resulted in an accentuation and a valuing of some form of individualization but certainly not the whole IPM sequence (Ironsides & Conaway, 1985, p. 127). The IPM itself had various interconnected elements, and it was not always feasible to see all of them operating in combination at the school or unit level particularly where the model did not appear to be perceived as a unified whole (Ironsides & Conaway, 1979, p. 72). To do anything considerably different from the conventional approach (to set up objectives, to keep some kind of records, or to do some kind of assessment and grouping) appeared adequate in a number of schools to demonstrate “having IGE subjects” and “employing the IPM” (Ironsides & Conaway, 1979, p. 76). In addition, in a significant number of schools the IPM took second place to the priority placed on the organization (Ironsides & Conaway, 1979, p. 72).

It was evident, however, that the IPM could function in small groups (such as multi-aged or single-aged contained classrooms) and Phase II gave abundant evidence of this. Many dedicated teachers operated in the IPM pattern in one or two subjects – in their own contained classrooms, in their personally-developed subunits with some collaboration with another teacher, or in other situations. And a few schools followed the IPM in a highly professional way in multi-aged units and in three or even four subjects (Ironsides & Conaway, 1979, p. 72).

In summary, less than half of 946 schools had at least one IPM subject, typically reading, during the phase of continuation. Also, the majority of IGE schools reported that they implemented individualized instruction and employed small-group instruction and independent study as part of IGE practices. Use of IPM was at a very low level: many unit teachers were not well aware of its details; many units used part of IPM or translated, modified, and reduced it in some way; and there were variations within and across units in using IPM. As with the multi-unit organization (MUSE), the Instructional Programming Model was not continued to the degree that the creators anticipated and its variations in the phase of continuation were not different from those in the phase of implementation. The majority of unit teachers could not accommodate the enormous number of radical departures from their own traditional classroom practices. Confronting diverse conflicting expectations from supervisors, parents and students, however, unit teachers developed their own system with respect to objectives, materials, assessments,

and so on. In doing so, they created a variety of hybrids by either adapting some aspects of the model to the traditional teaching practices or adapting existing programs to one or two aspects of the model. Eventually, the staff of only a small number of IGE schools incorporated the IPM into their daily instructional practices, leaving only part of the IPM institutionalized in their schools.

Categorization of IGE schools by Degree of Implementation

The Center evaluation team addressed the question of how many schools that called themselves IGE could reasonably be considered to have implemented IGE components. The team considered the Phase I Implementation Survey data to be the most valid, although clearly positively biased. Instead of working with all seven IGE components separately, the team collapsed them into three groups – the school (1), the instructional program (2, 3, and 4), and renewal (5, 6, and 7). Average implementation scores for the Phase I schools (N=159) were classified to denote actual or true, marginal, and nominal IGE schools, as described previously, with the marginal category divided into high (62.5-74.9%) and low (50-62.4%).

As Table 8.14 shows, in regard to total implementation score, only five were actual IGE schools, though 32 were high marginal schools. Given that many low ratings on total implementation score were due to low implementation of the renewal components – home-school relations, facilitative environments, and research and development that naturally would come later in an implementation cycle than the other components – the evaluation team focused on scores from the first two groups as another way to categorize these schools.

Table 8.14
Number of Phase I Schools Categorized by level of Implementation for MUSE, Instruction, Renewal and Total (N=159)

Level of Implementation	MUS	Instruction	Renewal	Total
Actual (75% to 100%)	13	13	5	5
High Marginal (62.5% to 74.9%)	37	45	17	32
Low Marginal (50% to 62.4%)	54	67	45	62
Nominal (Less than 50%)	55	34	92	60

Source: from *To Be, or Not To Be, IGE*, by T. A. Romberg and D. M. Stewart. In *Toward Effective Schooling* (p. 71), by T. A. Romberg (Ed.), 1985, Lanham, MD: University Press of America.

Table 8.15 shows a cross-tabulation of schools which fitted into each group for MUSE and for Instruction. From this tabulation, the evaluation team identified any school which was high marginal on both MUSE and Instruction as an actual IGE school; there were 38 such schools, 24% of the Phase I population, that fit this category. Next, schools which were at least high marginal on one aspect and low marginal on the other called marginal IGE schools; there were 30 such schools, 19% of the Phase I population. The remaining 91 schools, 57% were called nominal IGE schools (Romberg and Stewart, 1985, pp. 71-72).

Table 8.15
Number of Phase I Schools by Level of Implementation for both MUSE and Instruction

MUS	Instruction			
	Actual	High Marginal	Low Marginal	Nominal
Actual	7	5	1	0
High Marginal	5	21	11	0
Low Marginal	13	17	32	4
Nominal	0	2	23	30

Source: from To Be, or Not To Be, IGE, by T. A. Romberg and D. M. Stewart. In Toward Effective Schooling (p. 72), by T. A. Romberg (Ed.), 1985, Lanham, MD: University Press of America.

This categorization scheme was also applied to other phases of the IGE evaluation and Table 8.16 shows the number of each category of school participating in each of the four phases of the IGE Evaluation. Overall, nearly one-quarter of the schools who called themselves IGE were reorganizing their staffs by forming units, sharing decision making,

Table 8.16
IGE Implementation Scores for Schools In Phases I, II, III, and IV

Implementation Category	I	II	III	IV	IV
	N (%)	N (%)	N (%)	N (%)	N (%)
Actual IGE	37 (23)	10 (33)	2 (33)	1 (14)	4 (21)
Marginal IGE	28 (18)	5 (17)	3 (50)	1 (14)	----
Nominal IGE	94 (60)	15 (50)	---	3 (43)	2 (11)
Non-IGE	---	---	---	---	7 (37)
Unknown IGE	---	---	1 (17)	2 (29)	6 (32)
Total	159	30	6	7	19

Source: from To Be, or Not To Be, IGE, by T. A. Romberg and D. M. Stewart. In Toward Effective Schooling (p. 73), by T. A. Romberg (Ed.), 1985, Lanham, MD: University Press of America.

and making efforts to change the pattern of instruction in their schools (Note: In this group of schools, “institutionalized change” had occurred according to Berman and McLaughlin). Another 20% were heading in the same direction but encountered several problems in forming units, setting objectives, obtaining district/parental support, and so forth; they were not yet IGE but they were no longer a traditional school (Note: In this group of schools, “isolated continuation” took place according to Berman and McLaughlin). Finally, there were the majority, some 60%, who seemingly liked some of the ideas about IGE and who wanted to be identified with the concepts but who had failed to make the substantial organizational and instructional changes which reflect IGE (Romberg & Stewart, 1985, p. 72) (Note: In this group of schools, *Pro forma* continuation” or “discontinuation” took place according to Berman and McLaughlin). The next section describes the national picture of overall practices related to the implementation and continuation of Instructional Improvement Committee, one of the central aspects of MUSE, 1974-81.

Institutionalization Summary: Key Factors in the Phase of Continuation of MUSE/IPM

This section answers the question, “What factors facilitated the *processes* of continuing MUSE/IPM?” Huberman and Miles (1984) stressed that continuation or institutionalization of innovations depends on whether or not the change gets embedded or built into the structure (through policy, budget, timetable, etc.), has (by the time of the institutionalization phase) generated a critical mass of administrators and teachers who are skilled in and committed to the change, and has established procedures for continuing assistance (such as a trained cadre of assisters), especially relative to supporting new teachers and administrators (Huberman & Miles, 1984; cited in Fullan, 1991, p. 89). In the history of IGE, three major factors facilitated the continuation of MUSE/IPM: external support, continued inservice for the staff, and creative modification of the IGE program.

External Support

A successful IGE school in the institutionalization phase received continued

financial, technical, or moral support from such agencies as the state department of education, regional education agencies, teacher education institutions, Leagues, the school district, and parents. In relation to district support, Berman and McLaughlin (1978) noted:

District officials paid early attention to mobilizing broad-based support for the innovation. And after federal funding ended, mobilization efforts were increased to pave the way for the project's transition from its special status to its incorporation into key areas of district operations: the budget, personnel assignment, curriculum support activities, and the instruction program. In short, the groundwork and planning for sustaining a change agent project had the early, active, and continued attention of school district managers. (p. 20)

Rocky Mountain School pursued individualization through the implementation of IGE because of a mandate by the Colorado State Department of Education and the district's philosophy encouraging individualization (Klenke, 1975, pp. 91-92).

At Scott, a small group of parents was involved in selecting IGE for adoption, and supporting its implementation and continuation. The efforts of this small group of parents generated a minority of parental support for the implementation and continuation of IGE at Scott School. In addition, the district was supportive of IGE and provided assistance for staff members participating in inservice training workshops.

The department of education in New York provided continuing leadership and support for IGE at Alys Drive as well as other IGE schools in that state, while a regional education agency provided consulting support. Also, teacher education institutions not only offered summer workshops for staff members to attend, but also sent their student teachers to be involved in IGE at Alys Drive. At the district level, the assistant superintendent was supportive of IGE from the beginning and worked with interested persons from other districts to establish a Hub for the IGE schools in western New York, while the Board of Education granted permission to implement the innovation for a period of five years. Further, the SPC recommended that a brochure be prepared which would provide an overview of the multiunit school and the meaning of IGE so that teacher education institutions would participate in the program.

Continued Inservice

As at Alys Drive, the principal of a successful IGE school in the phase of

institutionalization not only participated in training programs such as a principal-unit leader workshop, but also helped the staff attend several inservice training sessions including district training programs and weekly inservice for the staff. The principal often played an important role in supporting staff development for new members because of turnover in the original cadre of project teachers. These successful IGE schools occasionally brought in outside speakers for workshops which were open to all IGE schools in the area. Thanks to these training opportunities, a few of the successful IGE teachers conducted workshops for the district, and served as consultants for schools in other districts.

Creative Modification

Given the fundamental change that IGE requested of a school and local constraints that hindered a complete institutionalization of MUSE/IPM, a number of successful IGE schools creatively modified the prototypic model of IGE in line with their local circumstances.

At Rocky Mountain, local constraints prevented the school from developing a differentiated staff and the school lacked appropriate instructional materials and hardware (Klenke, 1975, p. 95). No effort was made by the staff to specify school-wide objectives, nor was any effort made to coordinate the achievement of these objectives. Also, the lack of inter-team cooperation did not allow for this school-wide coordination. Most instructional decisions were made at the team level; and the decision boundaries were constrained by county guidelines. The intermediate team incorporated the multiage pattern into their instructional groupings; however, almost all instructional groups were ability grouped. Further, the upper team incorporated “very little” multiage grouping of students. The homeroom groups, therefore, were by grade level; and instructional groups were formed by ability levels within grade levels. One teacher, when asked about the 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.” (Klenke, 1975, p. 106). Despite the many benefits of multiage grouping, the parents, almost without exception, used the conventional “combination classroom” (e.g., a second- and third-grade combination) as a reference point. A teacher said that they were

wasting too much time on non-gradedness and both parents and county did not want to give up gradedness. Also, the county required reports to be submitted with grades, and parents were reported to in a graded fashion (Klenke, 1975, p. 108). One parent observed that “this non-gradedness may be emphasized but not carried out here.” Another felt that “a lot of parents want to know what grade their children are in” (Klenke, 1975, p. 108).

At Rocky Mountain, continuous progress was not well understood nor implemented and the few that referred to it usually described it as non-gradedness. One parent said it was “children working at their own achievement levels.” One teacher described it as “merely progressing by speed” (Klenke, 1975, p. 115). Except within the Wisconsin Design for Reading Skill Development, criterion referencing was not an assessment practice at Rocky. In spite of reported benefits afforded criterion referencing, the staff’s resistance to its use also arose in association with community norms that 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.” A parent reported, “parents should not have been required to come and have the score explained; some will not understand it.” A teacher said that the results of the Wisconsin Design for Reading Skill Development tests were “translated into traditional grade-level thinking” (Klenke, 1975, p. 115).

Regarding multiage grouping at Scott, one unit (Unit G) felt that the primary children, particularly the first grades, 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 (Klenke, 1975, p. 133). Concerning non-gradedness, 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 non-graded environment. District requirements seemed to present many of the difficulties in achieving non-gradedness. A teacher outlined these as “district reports, tests, and grade level objectives.” 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.

At Alys Drive, the major modification of the model for the multiunit school was in the minimal degree of multi-aging within intermediate and upper grade teams, and in the proposed organization for the 1976-77 school year when each team was expected to include students at a single grade level. In relation to IPM, general school-wide objectives, as defined in Step 1 of the IPM, had not been identified (Melvin, 1976, p. 188). However, the implementation of Steps 2 through 7 of instructional programming followed the model closely when the teams used the WDRSD materials and the suggested guidelines for implementation (Melvin, 1976, p. 173).

Illustrating a case of creative modification, a few schools reported that the turning point for successful continuation was related to cutting back the initial IGE thrust. These schools indicated that the goals for implementation were set unrealistically high for the first years, and the goals were later set at more attainable levels. Particular examples included dropping science as an IGE subject area, reducing student movement during the school day, and reducing emphasis on the IPM (Ironside and Conaway, 1979, p. 40).

In sum, an IGE school succeeded in institutionalizing MUSE/IPM due to: external support, continued inservice for the staff, and creative modification of the IGE program. A successful IGE school received continued financial, technical, or moral support from a variety of agencies. With the help of this support, the principal of a successful IGE school in the phase of institutionalization not only participated in several training programs, but also helped the staff attend several inservice training sessions. Thanks to these training opportunities, a few of the successful IGE teachers served as consultants for schools in their district as well as neighboring districts. Despite these training opportunities, however, the conflict between the fundamental change that IGE requested of a school and local constraints that hindered a complete institutionalization of MUSE/IPM led a number of successful IGE schools to creatively modify the prototypic model of IGE in line with their local circumstances.

In the following chapter, I summarize how key process factors in adoption, implementation, and institutionalization played out and resulted in different types of IGE schools: opportunistic, nominal, marginal, and true IGE Schools.

Chapter 9

Summary and Findings: Key Factors in Opportunistic, Nominal, Marginal, and True IGE Schools

In the history of IGE, different factors either facilitated or hindered the *processes* of innovation in the phases of mobilization, implementation, and institutionalization of MUSE/IPM.

Four factors played a major role in the phase of mobilization for MUSE/IPM: locus of decision, need for a change, readiness, and resources. According to the data, the first factor, “locus of decision,” had more to do with the district administration that made the decision on the adoption of MUSE/IPM than grass-roots staff. This top-down nature of decision making in the majority of school districts that adopted IGE was related to the fact that the major impetus for IGE adoption came from a federal government agency, i.e., the United States Office of Education (USOE) as shown in Chapter 4. The remaining three mobilizing factors – “need for a change,” “readiness,” and “resources” – pertained more to the staff at the building level than at the central office.

In relation to the phase of implementation, four key factors supported or constrained the processes of implementing MUSE/IPM in successful and less successful IGE schools: staff development, role relationship change, shared decision-making, and district support. Needless to say, schools implementing the IGE model needed initial and continued staff development because they encountered many unexpected problems during the changeover to IGE. Also, according to the developers of the model, it was important that the role relationships and responsibilities were clearly specified and understood so that participants in the implementation of MUSE/IPM could interact with one another with a shared understanding of what each was expected to do. In line with role relationship change, the model also demanded that the principal turn over systematically some of his/her authority to the units and that the individual teacher turn some of his/her authority over to the units (Selover, 1976, pp. 76-77). In addition to these factors, school district support played another big role in either facilitating or hindering the processes of implementing MUSE/IPM with or without respect to supportive policy, provision of consultation, budget, personnel, service, and facility support, materials, and

so on.

Institutionalization of IGE depended on whether or not the change got built into the school structure, generated a critical cadre of administrators and teachers who were committed to and skilled in the change, and established procedures for continuing assistance (Huberman & Miles, 1984). By the time of the institutionalization phase, most nominal and marginal schools had either discontinued the IGE program or remained traditional schools with scattered vestiges of IGE, while most of the true IGE schools continued into the institutionalization phase. In the history of IGE, three major factors facilitated the successful institutionalization of MUSE/IPM: external support, continued inservice for the staff, and creative modification of the IGE program.

The key factors described above weaved in and out of the history of IGE variously in opportunistic, nominal, marginal, and true IGE schools. These schools were characterized by a variety of combinations of these key factors that either facilitated or hindered the processes of mobilizing, implementing, and institutionalizing IGE as summarized in Table 9.1. Each factor in each phase helps to explain the degrees and processes of IGE innovation in different types of schools.

Table 9.1. Key Factors in Different Types of IGE Schools

School \ Phase	Mobilization	Implementation	Institutionalization
Opportunistic	Top-down decision, no need for a change, not ready, no resources		
Nominal	Top-down decision, no need for a change, not ready, little resources	Little staff development, no change in role relationship and shared decision-making, no district support	
Marginal	Top-down decision, no need for a change, not ready, some resources	Some staff development, mild change in role relationship and shared decision-making, little/some district support	
True	Joint decision, need for a change, readiness, and enough resources	Sufficient staff development, role relationship change, shared decision-making, and district support	External support, continued inservice, and creative modification

Opportunistic IGE School

The mobilization for MUSE/IPM in this group of opportunistic schools had more to do with factors external to the school building. After the political decision to select IGE for nationwide dissemination was taken, the focus of the grantee was on obtaining as many adoptions as planned for in as short a time as possible. As a result, the decision to adopt IGE was more or less beyond the control of the staff in the majority of IGE schools. Due to this politicized mobilization, IGE was adopted for symbolic or opportunistic reasons in a number of these schools. Thus, the staff of these schools felt no need for change, were uninterested in training opportunities for the initiation of IGE, acquired no IGE materials, had inadequate facilities for or did not utilize facilities in tune with IGE, and never called upon external support resources for initiation training. Expectedly, this group of schools showed no sign of implementing MUSE/IPM after this phase of mobilization. Although hard to determine, it was estimated that between 62 and 87 (22% to 30%) of 287 IGE schools fell into this category because these schools were known to have adopted IGE, but did not implement MUSE/IPM at all (Ironsides, 1972, p. 14).

Nominal IGE School

The staff in nominal IGE schools that would either co-opt or discontinue MUSE/IPM during implementation or institutionalization had also not been looking for an alternative to traditional education. Further, most of the staff were not involved in the decision to adopt IGE since the decision was made at a higher level. Not surprisingly, feeling no need for change, the staff was uninterested in training opportunities for the initiation of IGE. Moreover, the nominal IGE schools acquired few IGE materials, had inadequate facilities for or did not utilize facilities in tune with IGE, and rarely called upon external support resources for initiation training. Based on several sources (Barrows, Klenke, & Heffernan, 1979; Ironsides & Conaway, 1979; Goodridge, 1975; Lacy, 1972), more than 40% of 287 schools fell into this category.

After or during the stage of mobilization, the principal and unit leaders of a nominal IGE school attended a state-sponsored formal staff development workshop in 1971. The principal and unit leaders also participated in a few League activities;

however, there were no such opportunities for staff teachers or others. The total staff saw various IGE films once or twice, but several staff teachers indicated that the IGE films were repetitious and unrealistic. The staff was provided the booklets, but used them minimally. A 1-day session served as an overview; a few teachers attended a reading workshop (Ironside, 1972, pp. 175-176).

After these initial training sessions, however, school personnel had virtually no contact with other persons, schools, agencies, or materials related to MUSE/IPM. The state agency did not visit, nor provided other assistance. The school itself also remained aloof: no representatives to League meetings; no teacher attending a problem-oriented workshop; no one visited other nearby IGE schools. A number of resources came from the state coordinator, but since no IGE subject was operative, these were stored away for future perusal by the staff. The state office provided a detailed guide, but it was used minimally. Inservice training was limited to what might occur during unit meetings or came to a standstill; the use of booklets and filmstrips in and by the “units” virtually ceased (Ironside, 1972, p. 177; Ironside, 1973, p. 28).

In relation to role relationship change and shared decision-making in nominal IGE schools, there was evidence that principals, unit leaders, and teachers did not share common understandings and expectations regarding their role relationships and responsibilities. Thus, there were differences in perceptions regarding role behaviors expected of each participant. The past expectations of the participants’ roles and responsibilities that were deeply ingrained in the established institutional practices, did not easily change in a short time period without a fundamental transformation in the grammar of schooling.

The lack of change in role relationships and responsibilities was related to and/or resulted in the lack of shared decision-making in nominal IGE schools where neither of the above authority transfers – from the principal to unit and from individual teachers to units – took place. The principal of a nominal IGE school dominated IIC meetings, remained the major decision maker on both managerial and technical matters, provided little opportunity for distribution of decision-making, and handed out meeting agendas that were more like notes and announcements (Ironside, 1973, pp. 28-29). In these nominal IGE schools, unit leaders were not committed to the concept of IGE and did not

adequately prepare to discuss and defend in the IIC issues of concern to their unit members (Moyle, 1977, p. 222). The teachers in those schools did not perceive a reduction of centralization during the period of implementation and perceived themselves to have no involvement in making potent decisions of school-wide scope (Wright, 1976; Felker, 1980).

The lack of both changes in role expectations and relationships and shared decision-making was highly correlated with the lack of staff commitment. After schools had been in the program for a period of time, teacher commitment began to drop off (Gaddis, 1977). A number of the staff members left the school because they couldn't cope with the demands of the program. Consequently, unit teachers showed much resistance to teamwork, were not committed to planning together, held on to their own students, and taught single-aged students in self-contained classroom (Ironsides, 1973, pp. 28-29).

Further, nominal IGE schools witnessed that their districts did not fulfill their commitment to assist schools in implementing IGE and withdrew district financial support (Gaddis, 1977, pp. 188-198). Due to this withdrawal of financial support, the aides were cut back or they were completely eliminated from schools, or the student-teacher program was dropped; thus, teachers had a hard time grouping and there was no clerical help for record keeping (Gaddis, 1977, p. 192). In addition, the district turned down teachers' request for unit leaders' extra pay; then the school dropped IGE (Gaddis, 1977, p. 193).

In some school districts, rivalry over district funds existed between IGE and non-IGE schools. The non-IGE schools felt they were being slighted because the IGE schools were getting additional things; thus, there was pressure on districts from non-IGE schools to drop the program. In order to avoid the rivalry issue, districts simply withdrew their commitment to support IGE (Gaddis, 1977, p. 193). In another case, the former superintendent was very pro-IGE and encouraged schools to go IGE; however, a new superintendent came in with a different philosophy and discontinued the program (Gaddis, 1977, p. 195). Also, the community contributed to the failure of IGE by not supporting increases in local school taxes to support the innovation (Gaddis, 1977, p. 194). Not surprisingly, nominal IGE schools soon discontinued MUSE/IPM.

Marginal IGE School

The staff of marginal IGE schools that would either coopt or discontinue MUSE/IPM during implementation or institutionalization was similar to the above group of nominal IGE schools. They had not been looking for an alternative to traditional education and were not involved in the decision to adopt IGE since the decision was made administratively. Unlike the staff of the above nominal IGE schools, however, at least part of the staff of this group became interested in IGE because of the opportunities they saw for students. Frequently encouraged by the principal and supported by the central office, these schools acquired IGE materials, sometimes transformed traditional facilities into those in tune with IGE, called upon external support resources for initiation training, cooperated with team members in initiating MUSE/IPM, and incorporated some elements of MUSE/IPM into their curriculum and teaching practices. However, less than 20% of 287 schools fell into this category (Barrows, Klenke, & Heffernan, 1979; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972).

After or during the stage of mobilization, the principal, unit leaders, and a few teachers of a low marginal IGE school went to a state-sponsored training for principals and unit leaders in 1971. The staff was exposed to IGE filmstrips and books, followed by a local commitment meeting held for the staff. They later held a Preschool Workshop for three days usually in August 1971. This workshop consisted of staff meetings, the IIC and unit meetings, and a few hours with a consultant on Wisconsin "word-attack skills" component of WDRSD. Otherwise, educators in marginal schools had little training or discussion relating to their reform. While the Preschool Workshop gave considerable attention to new teachers, it focused little on MUSE/IPM plans or operations (Ironside, 1972, p. 189).

There was little or no school-wide inservice training after the Preschool Workshop, and virtually no use of consultants. One unit held its own inservice for a few hours, and another group met on a voluntary basis with the district leader to study the writing of behavioral objectives. The principal, unit leaders, and a few teachers all attended League training activities. However, staff made no visits to other MUSE/IPM schools, though the principal made one such visit. The principal had no direct contacts to the state coordinator for assistance of any kind, though the coordinator made two or three

general visits to the school (Ironside, 1972, p. 191).

A high marginal IGE school was active in the state League of schools. The principal and unit leaders attended several League training functions during the year of 1971-72, and reported back to the staff that these were valuable sessions (Ironside, 1972, p. 159). High marginal IGE schools called on some of external resources: state coordinator, district liaison, the IGE printed materials, visiting consultants, staff of other schools, district reading consultant, and the League. In addition, the principal and unit leaders attended a R&D Center-sponsored mid-year training workshop (Ironside, 1972, p. 159). Unit leaders and a few teachers made scheduled visits to other MUSE/IPM schools in the vicinity (Ironside, 1972, p. 160).

Nevertheless, the great share of the MUSE/IPM preparation and training was directed to the principal and unit leaders in high marginal IGE schools; except for what unit leaders might pass on, staff teachers were given much less opportunity to talk, study, improve skills, and so on. There was very little inservice training for the whole staff. A few units, e.g., three of five units, held inservice training within the unit in which filmstrips were discussed, IGE booklets were used, and unit operations were considered, with the emphasis on the IGE subject area (Ironside, 1972, p. 160).

In relation to role relationship change and shared decision-making, school personnel of marginal IGE schools understood the roles expected of each occupant, but they did not overcome not only the conflict between the old and new role relationships and responsibilities within an individual, but also tensions between role occupants among unit members as well as among the whole personnel as a group. An incongruence between the role expectations and need-dispositions of school personnel caused conflicts among the staff that manifested themselves in the form of problems of interpersonal communication, agreement on philosophies and teaching methodologies, and clarification of roles and responsibilities (Heffernan, 1976, p. 130).

With shared understandings of role relationships and expectations but not materialized within himself/herself, either the principal or unit teachers of a marginal IGE school did not turn over his/her authority to the units to a large degree. Sometimes the principals of nominal IGE schools encouraged discussion to some extent during IIC meetings and provided some opportunity for distribution of decision-making with respect

to technical matters, but remained the major decision maker especially on managerial matters.

Unit leaders of marginal IGE schools were not so much committed to the concept of IGE and prepared a little to discuss and defend in the IIC issues of concern to their unit members. The low effectiveness of the unit leader's representation function also contributed to the low cohesiveness of the IIC (Moyle, 1977). Marginal IGE school teachers perceived themselves to have little involvement in making potent decisions of school-wide scope (Wright, 1976; Felker, 1980).

The unit leader and unit teachers shared common understanding regarding planning and deciding together; however, they had problems when they taught together, while putting their plans and decisions into practice. They tried to solve interpersonal conflicts through various channels, resulting in success some times but in failure many times; or one unit making some progress but the other unit not doing well. One or two units' teachers employed team teaching, cooperated in planning, and shared resources while other units' members did not learn how to do much more than plan together (Ironsides, 1972, p. 190).

Most of marginal IGE schools saw that the superintendent, and particularly the board of education, were supportive and helpful; this support included considerable expenditure for materials, travel, and summer workshops. For example, the Board's formal monthly Newsletter pushed the concepts and informed parents simultaneously (Ironsides, 1972, p. 175). District personnel were generally supportive and steered extra funds for materials, addition of aides, and so on (Ironsides, 1972, p. 153). At the district level, a local liaison was appointed early, and this person along with the superintendent attended all meetings of the formal training chain except a "national awareness" session. A district reading consultant was assigned to serve MUSE/IPM schools (Ironsides, 1972, p. 153). The district liaison helped the school with a plan on developing and implementing an IGE curriculum: how best to use aides, what supplemental materials to have available, and how to keep records (Ironsides, 1972, p. 159).

After the stage of implementation, all of the low marginal IGE schools where "co-optation" occurred and some of the high marginal IGE schools where "mutual adaptation" occurred did not continue into the phase of institutionalization. However,

some of the high marginal IGE schools continued into the stage of institutionalization.

True IGE School

In contrast to the opportunistic, nominal, and marginal IGE schools, a majority of the staff in true IGE schools that would successfully implement and institutionalize MUSE/IPM had been looking for an alternative to traditional education, made a joint decision to initiate IGE, and often displayed a willingness to work extra hours and cooperatively in adopting the program (Ironside & Conaway, 1979, p. 42). In these schools, the adoption decision was shared by the principal and staff; they accumulated IGE materials; they arranged for open space and had a library/IMC available for the purpose of IGE-related instruction; and they called on such opportunities as consultants, site visits, and several types of training for initiation. According to the research (Barrows, Klenke, & Heffernan, 1979; Ironside & Conaway, 1979; Goodridge, 1975; Lacy, 1972), less than 20% of 287 schools fell into this category.

After or during the stage of mobilization, the principal and unit leaders of a true IGE school attended a state-sponsored staff development workshop in 1971. The staff viewed IGE films and strips; all attended college-sponsored conferences in 1970-71. The staff participated in 1-day local commitment/ awareness session. The total staff attended Preschool Workshop held for two days in September 1971. Workshop agenda had four emphases: IIC meeting, general staff meeting, introduction to Wisconsin word-attack design, and lengthy team meetings. The workshop – more a planning session than one devoted to training – dealt with: team assignments, children's options, use of materials, "rules" for unit and IIC meetings, visit policies, use of open space areas, and so on (Ironside, 1972, p. 196).

After initial training, the principal called on state coordinator for training materials and assistance with IGE subject. Visits to other MUSE/IPM schools were made in fall 1971. The principal attended League training sessions and school personnel attended workshops sponsored by the R&D Center. The principal, unit leaders, special teachers, and reading teachers attended an R&D Center-sponsored 1-week unit leader training workshop and reading teachers attended R&D reading workshop in which mutual support sessions with staffs of one or two other MUSE/IPM schools were also

held (Ironide, 1972, p. 198).

Also, school-wide inservice took place several times, in one case two days, another for one day, several for an hour or two. With the state coordinator present, the sessions involved viewing filmstrips and unit solving of problems posed in film. The unit leaders attended a unit leader training session (goal setting and student assessment in the unit), followed by two hours of unit meeting to work out assessment of “unit” accomplishment against criteria in the R&D Implementation Guide. Another inservice day included IGE films, teamwork on math and reading procedures, and development of IGE-type instructional units in science and social studies. Sessions were dovetailed into district’s own inservice schedule so that purposes of non-gradedness, continuous progress, and so on, could be dealt with and IGE materials could be used. Unit inservice was not the rule, though: a few units held one hour inservice sessions for whole year; one unit held sessions for two and a half hours during which IGE films and strips were used at times; and a few units held none (Ironsides, 1972, pp. 198-199).

In relation to role relationship change and shared decision-making, with shared understandings of role relationships and expectations among themselves, school personnel of true IGE schools overcame not only the conflict between the old and new role relationships and responsibilities within an individual, but also tensions between the principal and unit leaders as well as among unit members. Whenever there was an interpersonal conflict, they solved these conflicts through constructive discussions during formal unit meetings and informal encounters.

In relation to shared decision-making in true IGE schools, both the principal and unit teachers turned over his/her authority to the units. In successful IGE schools, the principal shared his/her authority and power to make decisions with unit leaders; thus the IIC meetings were characterized by effective leadership by the principal, give-and-take, productive use of time, participation by all. In these schools, the decision-making was characterized more by consensus, participatory and delegating styles than unilateral one. The principal of a true IGE school encouraged the increased participation, although the principal felt that it was necessary for the staff to improve decision-making skills. When there was a concern with the communication between principal and staff, the principal (and IIC’s) sought to solve the problem via staff meetings, principal attending unit

meetings, notices, parties, and so on (Ironsides, 1972, p. 210).

In true IGE schools, unit leaders were committed to the concept of IGE and adequately prepared to discuss and defend in the IIC issues of concern to their unit members. The effectiveness of the unit leader's representation function also contributed to the cohesiveness of the IIC through the facilitation of horizontal and vertical, two-way communication (Moyle, 1977).

With shared role expectations and shared decision-making, units of a true IGE school, moved smoothly through planning, scheduling, teaching assignments, parent communications, and so on. They shared children, rooms, resources, teaching skills; and teams of teachers and aides worked together with varied groups of students often in an open space area. The units had good leadership and open communication, and the meetings were productive. All units worked out "team groundrules" (Ironsides, 1972, p. 196). In doing so, they moved from a self-contained classroom to a team-oriented unit.

However, even some of true IGE schools could not reach a point where they completely solved inter-unit communications or school-wide coordination problems. Given the demands for maintaining rationalized practices to handle a batch of students, it was a fundamental transformation for them to cooperate between units and achieve school-wide coordination that proved practically impossible.

The school district supported a true IGE school in different ways. For example, the District had definite inservice schedule, and devoted summer work to development of objectives and outlines in reading and math. Also the district had strong curriculum committee, which served the district policy function regarding MUSE/IPM in the school (Ironsides, 1972, p. 195).

A successful IGE school in the phase of institutionalization received continued financial, technical, or moral support from such agencies as the state department of education, regional education agencies, teacher education institutions, Leagues, the school district, and parents. A true IGE school pursued individualization through the implementation of IGE because of a mandate by the State Department of Education and the district's philosophy encouraging individualization (Klenke, 1975, pp. 91-92). In another true IGE school, a small group of parents was involved in selecting IGE for adoption, and its implementation and continuation. Also, teacher education institutions

not only offered summer workshops for staff members to attend, but also sent their student teachers to be involved in IGE schools, while the SPC recommended that a brochure be prepared which would provide an overview of the school and the meaning of IGE so that teacher education institutions would participate in the program. At the district level, superintendent or assistant superintendent of the district worked with interested persons from other districts to establish a Hub for the IGE schools, while the board of education granted permission to implement the innovation for a certain period.

The principal of a successful IGE school in the phase of institutionalization not only participated in training programs such as a principal-unit leader workshop, but also helped the staff attend several inservice training sessions including district training programs and weekly inservice for the staff. The principal often played an important role in supporting staff development for new members because of turnover in the original cadre of project teachers. These successful IGE schools occasionally brought in outside speakers for workshops which were open to all IGE schools in the area. Thanks to these training opportunities, a few of the successful IGE teachers grew to conduct a workshop for the district, e.g., district's substitute teachers, and serve as consultants for schools in other districts.

Given the fundamental change that IGE requested of a school and local constraints that hindered a complete institutionalization of MUSE/IPM, a number of successful IGE schools creatively modified the prototypic model of IGE in line with their local circumstances such as district requirements, parental expectations, teaching philosophy, and student needs.

At a true IGE school, local constraints were preventing the school from developing a differentiated staff (Klenke, 1975, p. 95). Another true IGE school organized each team to include students at a single grade level. At another school, one team incorporated "very little" multi-age grouping of students. The homeroom groups, therefore, were by grade level; and instructional groups were formed by ability levels within grade levels (Klenke, 1975, p. 106).

Concerning nongradedness, 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. District requirements seemed to present many of the difficulties

in achieving nongradedness. A teacher outlined these as “district reports, tests, and grade level objectives.” 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 (Klenke, 1975, p. 108).

At a true IGE school, continuous progress was not well understood nor implemented (Klenke, 1975, p. 115). In this school, except within the Wisconsin Design for Reading Skill Development, criterion referencing was not an assessment practice. In another school, the staff’s resistance to the use of criterion referencing arose in association with community norms that required a comparison of student growth with grade level norms (Klenke, 1975, p. 115). At another school, general school-wide objectives, as defined in Step 1 of the IPM, had not been identified (Melvin, 1976, p. 188). However, the implementation of Steps 2 through 7 of instructional programming followed the model closely with respect to WDRSD (Melvin, 1976, p. 173).

Epilogue: Lessons from the Experience of IGE

The Process of Change vs. the Content of Change

As discussed in Prologue, educational change involves two main aspects: the process of change and the content of change. In relation to the process of change, I described how various process factors played out in the phases of mobilization, implementation, and institutionalization in different types of IGE schools. In relation to the content of change, this study described the degree to which two major components of IGE – the multi-unit organization (MUSE) and the instructional programming model (IPM) – were adopted, implemented, and institutionalized. In the history of IGE, with respect to the aspect of change *process*, the lack of staff training opportunities was associated with the weakness of the IGE Change Model. On the aspect of change *content*, the low degree of IGE implementation and institutionalization was related to the fact that the IGE system was too fundamental in its degree of reform, attempting to transform the grammar of schooling.

The Process of Change for IGE

The IGE Change Model and Inadequate Training Opportunities

The process factors that hindered the mobilization and implementation of IGE as well as the low degree of IGE implementation were either directly or indirectly related in large part to the weakness of the IGE Change Model. Apparently not cognizant of the complicated implementation processes, IGE developers conceptualized an ideal process for the adoption and implementation of their innovation. Adapted from the Research, Development, and Diffusion (RD&D) Model, the IGE Change Model consisted of five phases: awareness, commitment, changeover, refinement, and renewal (Heffernan, Mancusi, & Klenke, 1976, p. 13). The first two phases – awareness and commitment – were related to the adoption process; and the remaining three phases – changeover, refinement and renewal – were part of implementation activities.

Primarily concerned with the diffusion of an innovation, the IGE Change Model was not specific enough to include training arrangements to develop various skills

required specifically to implement IGE (e.g., group dynamics skills) that the practitioners found to be essential in the changeover to IGE. The IGE Change Model described the changeover phase simply as:

When an agency decides to adopt IGE, representatives are selected to attend appropriate workshops so that they may become fully knowledgeable in the concepts and practices of IGE. Following this initial inservice activity, the representatives engage in activities that help colleagues become thoroughly acquainted with IGE. Plans for implementing IGE are then operationalized. In this phase, external resource persons are often required to provide assistance. (Walter, 1975, p. 17).

In describing the strategy for nationwide IGE implementation, IGE Implementation Guides (1971) suggested that the Center and collaborating educational agencies design one-week institutes in the phase of maintenance-refinement – a phase in the early four-phase model. This suggestion was made based on the observation during the field testing by the Center staff in 1970-71 that a number of IGE personnel had not thoroughly mastered the program's concepts and were deficient in major skills. One of these institutes might have included an agenda of group dynamics techniques for unit leaders. However, the Center did not sponsor any workshop focused exclusively on this agenda during the nationwide installation period 1971-72. (Only a few teacher education institutions provided IGE teachers with inservice sessions focused on group dynamics techniques.)

Following this IGE Change Model, the Center provided various training opportunities for the nationwide installation of IGE as described in Chapter 4. However, the suggested "training chain" was not a constant which was practiced or recognized by all personnel involved. Relatively few district personnel participated in the local commitment and training sessions. It was not typical for principals to be involved in the four steps which applied to them. Some schools had no local preschool training for the staff. Not all principals and unit leaders attended the training arranged for them at the state or university level (in many cases because unit leaders had not yet been assigned). And many districts did not hold local commitment/overview sessions for school staffs (Ironsides, 1972, pp. 16-17).

Thus, the "training chain" notion did not succeed in the sense that each district and/or school staff participated in all elements. In addition, personnel at all levels noted

particular weaknesses in the training provided and voiced that it had all happened too fast, that it was overly theoretically oriented without follow-up assistance from the Center, and that a longer planning period—along with more practical training—was needed for effective installation. Further, all of these training opportunities favored principals and unit leaders. Nonetheless, contrary to the expectations of the IGE planners, the “training chain” did not make many school leaders feel adequately prepared to pass the training on to their staffs. Thus, school staff (and others) had to find ways of fulfilling their training needs on a local basis (Ironside, 1972, pp. 17, 222).

In order to solve the above problems, the Center staff made itself available—on call—to states, districts, and local schools, and participated in or directed dozens of “extra” training sessions. Some of these overlapped into the school’s own inservice training and into League training functions, but many were conducted for several schools together or for selected staff. In effect, there *were* opportunities for principals and unit leaders (and some school staffs) to get continued training and exposure, although apparently this was not automatic. However, schools had to seek such assistance via the state coordinator (Ironside, 1972, p. 222).

Also, the installation team made numerous school visits (on a sampling basis in several states) in order to gain their own feedback on operations during the year; inevitably, such visits constituted training and consulting assistance. Thus, in addition to those formal training chain elements in which the Center was directly involved, the Center staff was responsive to special requests and went out on troubleshooting missions as well. In order to accomplish this, the installation team was supplemented by a group of school practitioners (from Wisconsin) who were specially prepared for the role (Ironside, 1972, p. 222). However, these additional training opportunities apparently still fell far short of meeting the needs of IGE practitioners during the initial nationwide IGE implementation.

In an effort to provide IGE practitioners with more practical inservice training, the Center sought greater involvement of teacher education institutions in 1973. Up to that time, the efforts of the Center had focused primarily on working closely with seven teacher education institutions. The lack of greater involvement in teacher education was in part due to the fact that the Center was never funded for such efforts, since two other

R&D centers had a teacher education focus. The experiences with the seven cooperating institutions, however, provided valuable information for future efforts. Moreover, the move toward competency or performance-based teacher education, increased field-based experiences in addition to the conventional student teaching activities, and, in the case of declining enrolments, the continuing education of already certificated professionals were national trends that made IGE an attractive alternative to teacher educators. Another factor that elicited the interest of teacher education administrators was the increasing number of IGE schools, the staffs of which were demanding more consideration from nearby institutions. The Center staff also concluded that teacher education institutions were the only agencies that could adequately prepare personnel for filling the various roles in IGE (Walter et al., 1975, pp. 29-30).

Meeting the expectations of the Center staff, many teacher education institutions provided IGE practitioners with practical support and consultation. Many professors offered credit graduate courses on IGE for principals, unit leaders, and unit teachers where practitioners often brought problems and solved. Professors also offered weekend classes, drive-in conferences, summer sessions, unit leader workshops, reading workshops, and inservice training on group dynamics. They often sat in on IIC meetings; visited units, classrooms, and teachers; supervised student teachers working as interns as well as freshman students working as clerical or instructional aides; and taught methods classes in the school building. Sometimes, professors held monthly meetings at which information concerning workshops and related events were disseminated. Further, they helped school personnel make a movie and write a pamphlet on IGE (Paul, 1974).

Nationwide, however, the number of teacher education institutions involved with IGE was small compared to the number of IGE schools that needed their help. The number of teacher education institutions involved with IGE increased from seven in 1971 to 15 in 1973 in the 14 states that provided any type of on-campus or off-campus credit or noncredit work in IGE including inservice institutes and workshops. Thanks to the IGE Teacher Education project funded by the Sears-Roebuck Foundation during 1973-76, a total of 87 teacher education institutions in the 14 states provided work in IGE by the fall 1976. Some 85 had credit undergraduate IGE courses, some 53 had credit graduate courses for unit leaders and staff teachers, 57 had credit graduate courses for principals

and other administrators, and 48 had noncredit staff development institutes and workshops. There were overlaps in these numbers, of course. Among these institutions, only three had a comprehensive on-campus undergraduate program for future elementary school teachers (Lins & Klausmeier, 1977, pp. 12, 30, 35).

Despite this increase in the number of teacher education institutions, the number of IGE schools that had extensive involvement with them was very small. Very often, IGE schools interacted with these institutions only if they were located in the vicinity. Moreover, a number of IGE schools did not call upon these higher education institutions for any inservice training or follow-up consultation in implementing IGE. In these schools, the principals and unit leaders who had attended workshops sponsored by either the Center, state education agencies, or Leagues were supposed to conduct inservice workshops for staff teachers. However, they simply did not have the capacity to conduct those workshops on several topics related to IGE including group dynamics skills. Thus many IGE schools did not even have an opportunity to be exposed to those essential skills in workshops let alone in practice. Even some IGE schools that enjoyed these opportunities failed to implement IGE. The following example of staff development in two schools conspicuously illustrates the difficulties in changing over to the multiunit school organization. The staffs of these two schools received similar inservice training and follow-up consultation. One school moved to the multi-unit school organization, while the other failed to successfully change its structure.

The Palmer School and Spartan School: Organizational Development Training

Unlike the Wisconsin Center that relied on the training chain especially for educational leaders in the hope that those leaders would be able to pass on to the staff, the Center for the Advanced Study of Educational Administration (CASEA), University of Oregon, provided the whole school staff with systematic pre-school inservice training as well as follow-up consultation on changing from the traditional school structure to the multiunit school structure. As part of CASEA's multi-unit project, two schools – Spartan School and Palmer School – were selected as Organizational Development (OD) schools. While receiving OD training, the Spartan School faculty moved into differentiated staffing, the multi-unit structure, and team teaching both structurally and psychologically

during 1970-72, while the Palmer School faculty moved quickly into unitized arrangements both structurally and psychologically over the 1970-71, though its unitization, training and functioning of the leadership team all disappeared in 1972.

The major emphasis of this organizational development (OD) training was on improving the “self-changing ability of school organizations,” that is, giving school systems a capacity for “organizational self-renewal.” Since the emphasis of OD was on the processes of change, not the content, the OD trainer did not tell a school staff that it must adopt a specific organizational structure or way of doing things (Murray, 1973, p. 24).

The OD trainers had six objectives focused on problems within schools that prevented the release of existing human potential. To release this human potential, the trainers helped to: (1) develop clear communication; (2) build trust and increase understanding; (3) involve more people in the decision-making process; (4) create an open problem-solving climate; (5) increase group effectiveness; and (6) uncover conflict (Schmuck & Miles, 1971). In order to achieve these six objectives, OD trainers followed three stages that represented a general guide (chronologically) for organizational training with school staffs.

Stage 1: Improve Communication. The “open” communication channels necessary for effective transfer of information included both interpersonal communication as well as skills in transferring cognitive data. Increased interpersonal openness included developing verbal skills in “sending” and “receiving” messages in the cognitive and affective content areas (Murray, 1973, p. 26).

Stage 2: Changing Norms. Changes in the expectations of what was appropriate behavior could be established by structuring exercises and procedures that called for essentially new ways of behavior. By utilizing a structured event, the risk of new behavior was minimized. By structuring the type of behavior called for, the strength of others viewing the event and carrying new expectations reinforced the new patterns of behavior (Murray, 1973, p. 26).

Stage 3: Structural Change. The culminating phase of organizational training was to build new functions, policies, and procedures that become formal and institutionalized. Ideally, the multiunit school was to emerge here, during Stage 3, as the most effective

and maximally rewarding use of resources for goal achievement. The stages of organizational training were designed to allow the subsystem to define its own methods and procedures from within itself, and to establish special roles for assessing and monitoring organizational progress (Murray, 1973, pp. 26-27).

In addition, the CASEA trainers sought to make the OD training for unitized staffs as meaningful and relevant as possible, and to insure the effects of the training would be felt after returning to school. With a framework encouraging experimental training, they encouraged the following:

1. Practice new behaviors away from immediate demands of school day;
2. Practice communication through face-to-face interaction;
3. Pose a discrepancy between “real” and “ideal” state of affairs;
4. From confrontations with discrepancies would emerge problems;
5. A problem-solving sequence is used while working on a real problem; and
6. Follow-up training events were scheduled in the fall and spring of the school year to support new norms and roles established during the fall training (Murray, 1973, pp. 27-28).

During the period of OD training, the following factors either facilitated or hindered the moves to the multi-unit structure in Spartan and Palmer Schools. These factors exemplify how complicated and difficult it was for a school to disturb much of the grammar of schooling.

Readiness for Multi-unit Structure. Prior to OD training, the individual respondents of Spartan School rated as highest the goal statement, “giving individual attention to students.” As with other successful IGE schools, this meant a closer connection between individual and organizational goals and a higher readiness for the innovation. In contrast, Palmer staff valued as most vital “ensuring the students learn basic skills” in 1970. Although Palmer rated “giving individual attention to students” as the highest goal statement in 1971, Palmer returned to their 1970 ranking by 1972 (Murray, 1973, pp. 343-344).

Readiness for OD Training. Palmer was not ready for OD training in terms of teachers’ feelings of competence or efficacy. The early unitization attempts at Palmer decreased teachers’ feelings of competence or efficacy over their professional duties as evidenced in the frequent mention of concern for student conduct, which did not happen in Spartan. Attempting changes too soon, without feeling of success, led to frustration, an

over-zealous concern for maintaining order, and a reversion to high amounts of individual autonomy among teachers. These in turn contributed to an abandoning of collaborative and innovative arrangements (Murray, 1973, p. 345).

Selection of the Leadership Team. In Palmer, many of the team leaders did not evidence successful leadership in a team because they: (1) were chosen from within the staff by a “popularity contest” process of selection; or (2) were prior friends of the principal and carried debts to him or were unable to “be their own man” within the units. In contrast, in Spartan, the team leaders were: (1) chosen from outside the staff; or (2) selected from within the staff using objective criteria (e.g., prior experience as supervisor, and so on) (Murray, 1973, p. 345).

Ownership of the Innovation. The ownership of “the innovation” (implementing unitized structure) appeared at Spartan but not at Palmer. Important factors contributing to the amount of ownership were: (1) the amount of push or coercion felt from the technical consultants; and (2) whether or not the innovation matched the individual goals of the teachers. At Spartan one technical consultant acted more as a “process innovator” rather than a “content innovator” (Murray, 1973, pp. 345-346). When the trainers attempted to relate the innovation to a set of common problems in the schools, the Spartan staff experienced success with the problem-solving groups and received trainer support for these, while the Palmer staff did not. Also, the tertiary problem of “lack of a clear picture of what multiunit structure could look like at Spartan” was analyzed using this sequence at Spartan, but not at Palmer (Murray, 1973, pp. 346-347).

Informal System Resisting the Formal Arrangements. Resistance can be expected if the nature of the change is not made clear and if the change ignores the already established institutions in the group. Also, resistance can be expected to the degree which persons influenced by the change have pressure put on them to make it (Zander, 1962, pp. 549-545). The informal system at Palmer resisted the attempts to change its norms (high amounts of confiding about personal matters in the “in” group and low amounts of openness regarding disagreements in the school) which the sub-group valued. However, this kind of resistance did not happen at Spartan (Murray, 1973, p. 348).

Participation and the Principal. Although the principle of participation has been widely supported by various investigators, there is reason to believe that under certain conditions, restriction of participation is more effective than participation (Fiedler, 1964). At Palmer, the principal perceived the training as creating an unfavorable task situation; thus, he resorted to autocratic styles of maintaining influence and restricted to a large extent staff participation in decisions. In contrast, the Spartan principal perceived the training as creating a favorable task situation, and resorted to a more participative management style (Murray, 1973, p. 350).

Early Attempts at Techno-Structural Change. The Palmer staff's rapid moves into unitized arrangements in two units, combined with a lack of norms and procedures or handling cross-unit problems, put considerable stress on the staff. The events at Palmer were examples of taking "action" toward a goal prior to a clear problem solving and sharing of realities on just what the problem was. Techno-structural interventions – the kind of training where unitized structure would be seen as the legitimate goal for the client and the trainer – should have followed a period of OD training to establish functional norms and procedures in their organization. Early attempts at techno-structural interventions at Palmer did not provide the same results as later techno-structural interventions at Spartan (Murray, 1973, p. 352).

Leadership Team Functioning. The presence of a functioning leadership team that utilized the unit leader link pin structure to increase multi-directional communication was evident at Spartan, but not at Palmer. Measures of high mutual influence (teachers' influence over the principal) increased overall at Spartan but decreased at Palmer. Although little change occurred at Spartan, the steep decline in satisfaction with the job paralleled the decline in teacher influence over the principal at Palmer (Murray, 1973, p. 353).

In summary, given these factors (readiness for the multiunit structure and OD training, selection of the leadership team, ownership of the innovation, informal system resisting the formal arrangements, participation and the principal, early attempts at techno-structural change, leadership team functioning) involved in the changeover to the multi-unit structure, the IGE Change Model was too simplified to provide those involved in IGE implementation with practical guides. Apparently geared to the diffusion of a

simple product, the IGE Change Model did not prescribe comprehensive and systematic strategies for training the staff to transform their educational beliefs, role expectation and relationship, knowledge and skills of teaching/learning process, and their attitudes in favor of IGE. In addition to the weakness of the IGE Change Model, the reason why the traditionally organized schools did not change over to IGE schools is largely because the IGE system was too fundamental in its degree of reform. The contents of IGE aimed to transform the grammar of schooling – an established standard – too deeply ingrained in the minds of the practitioners as well as the public to replace with any other form of organization.

The Contents of Change

The IGE system directly challenged the established institutional practices by aiming at replacing age-graded, self-contained classrooms – a change not easily acceptable for many practitioners who were trained for and used to the standardized organizational forms. Tyack and Cuban (1995) maintain that teachers as well as the general public are accustomed to elementary schools that are divided into self-contained classrooms called “grades.” Under these institutional arrangements, teachers are expected to monitor and control students, assign tasks, and ensure that work has been accomplished. Teachers and students socialized to such routines often find it difficult to adapt to different structures and rules. Over time, such established institutional forms come to be understood by educators, students, and the public as necessary features of a “real school” (Tyack and Cuban, 1995, pp. 85-86).

The above notion was supported by a perspective on school organization that assumes that rationalized activities are necessary for school-system functioning for two reasons: (1) the school system is responsible for a uniform product of a certain quality; (2) socializing children and adolescents for adult roles is massive and complex work (Bidwell, 1965, p. 974). Demands for uniformity of product and the long time span over which cohorts of students are trained press for rationalization of activities and thus for a bureaucratic basis of organization (Bidwell, 1965, pp. 976-977). At the same time, the typical educational technology requires persistent interaction between an individual teacher and his/her students (Bidwell, 1965, p. 975). Given this aspect of the educational

technology, the division of labor in school systems is both temporal and functional. Over time the activities are divided into the school year or the semester. The temporal division of labor is tied to age-grade placement of students categorized into school grades or classes, which correspond to each age-grade represented in the student body. This close correspondence of school grades and age-grades arises as school systems become routinized, so that students must be moved through the system in batches and cannot be assigned to school grades individually on the basis of achievement (Bidwell, 1965, p. 975).

The very age-graded, self-contained classroom that the IGE developers wanted to replace was itself the result of previous reformers impressed with the division of labor and hierarchical supervision common in factories, prominent among them city and state superintendents and school board leaders. This age-graded, self-contained classroom was created by educational reformers seeking educational bureaucracy in the 1840s. Regarding the objective and efficient classification, or “grading,” of pupils, as crucial to educational bureaucracy, from Horace Mann in Massachusetts to Calvin Stowe in Ohio to John Pierce in Michigan, leading common school crusaders urged communities to replace the heterogeneous grouping of students with a systematic plan of gradation based on the Prussian model. Knowing that educational function necessarily reflected architectural form, John Philbrick actually provided a concrete model for his urban colleagues. He convinced the Boston school board that the proper classification of pupils required a new kind of building – one which has since been dubbed the “egg-crate school.” In 1848, the new Quincy School was dedicated and Philbrick became its principal (Tyack, 1974).

When the U.S. Commissioner of Education surveyed practices in forty-five cities in 1870, already the pattern of eight years of elementary school had become the norm (although there was considerable variety in the division of schools into primary and grammar categories). A nineteenth-century student of the grading of schools observed that “by 1860 the schools of most of the cities and large towns were graded. By 1870 the pendulum had swung from no system to nothing but the system.” From 1910 to 1930 to 1960, the number of one-room (non-graded) schools declined from approximately 200,000 to 130,000 and finally to 20,000 (Tyack, 1974, p. 25).

In addition to its claims of pedagogical efficiency, the graded school had the

virtue of being easily reproduced as the population of children mushroomed in cities, no small consideration in the chronically overcrowded urban systems. It mirrored as well the hierarchical, differentiated organizations in which urban dwellers increasingly conducted their business, both public and private. Despite criticisms both inside and outside the educational profession and several experimentations with alternatives to the year-by-year system of grading, the graded school became firmly ensconced as part of the grammar of schooling, for it seemed to solve key organizational problems (Tyack & Cuban, 1995, pp. 89-91).

The notion of the grammar of schooling helps to explain that the characteristics of 20th century public school organization did not lend themselves to the IGE system. Most U.S. public schools, it seems, could not reform themselves beyond the limits of the established nature of a “real school” (Tyack & Cuban, 1995). Given the strong hold of the established institutional forms on teachers as well as the general public, it is not surprising that the three major elements of IGE – sharing decisions, teaching in teams, and non-gradedness – were difficult to implement, while the Instructional Programming Model was not conducive to providing for diverse learning opportunities for individual students.

Sharing Decisions Within the Instructional Improvement Committee

As described in Chapter 6 and Chapter 8, the membership, modes of operation, and functions performed by the IIC were substantially different from the prototypic multi-unit organization model and varied from school to school during the periods of implementation and continuation, 1971-1981. Although IGE schools were moving toward decentralization of authority, the principal was still the major decision maker in most of the managerial and curricular domains, and a unilateral decision-making style was predominant over consensual or delegating styles, leaving unit leaders and teachers feeling a lack of involvement in decision-making during the phases of implementation and continuation. Thus, the IGE goal of sharing decision making was only moderately achieved, falling far short of the standards that the designers of the prototypic multi-unit model set forth.

Under the multiunit school structure, the principal and unit leaders were to share

decision-making and reach decisions by consensus. However, it took time for school personnel to learn new skills (e.g., group dynamics skills) necessary to be involved in shared decision-making. Also, these skills were related to the personality of unit leaders, over which the principal did not have control. Further, as shown above, the Center did not provide sufficient training opportunities for IGE practitioners to develop several skills related to shared decision-making. Without adequate training, it was more difficult to reach decisions than before while sharing managerial, instructional, and technical issues among IIC members.

The principal and unit leaders were not experts at IGE. Thus, they brought different opinions to the IIC meetings. Everybody brought a different awareness of the program, and these couldn't be brought together unless the leadership had a clear idea to bring them together. Sometimes, when the unit leaders had an agreement, the principal disagreed. These differences led to confusion among IIC members and often made members feel that the new system was less effective/efficient. When they did not reach an agreement, then it was difficult to put any parts of IGE into practice. These confusions led many principals back to the previous power distribution. These IGE principals did not give up their authority, as revealed in several studies (Black, 1976; Gramenz, 1974; Ironside, 1973; Moyle, 1977; Nerlinger, 1975; Richardson, 1972). Pressure from internal and external sources could easily sway the decision to continue or drop a program, particularly if it caused a conflict in the principal's educational philosophy. Thus, it was more likely that IGE continued when there was a match between the IGE program and the principal's educational philosophy and skills (Gaddis, 1977, p. 198).

In an IGE school, the job of the principal was considerably more difficult than in the traditional school, where the principal related to teachers on a one-to-one basis. In an IGE school, the principal related to the entire unit. In addition, the principal opened up new dimensions of group dynamics and had to get at group feelings, which became cumbersome. Although teachers had input, the principal had to make the final decisions. In order to share decisions with unit leaders, the principal had to attend more meetings under the multiunit school structure than under the traditional school structure. These increased meetings prevented the principal from visiting classrooms, observing and helping teachers, observing and helping children with problems and so on (Paul, 1974).

The principal also attended the league and/or SPC meetings, where the principal often dealt with the topics s/he already had discussed somewhere else. Thus, there were many time-consuming duplications in meetings.

Although the principle of participation has been widely supported by various investigators, there is reason to believe that under certain conditions, restriction of participation is more effective than participation (Fiedler, 1964). A number of principals perceived the inservice training on IGE as well as the multiunit structure as creating an unfavorable task situation; thus, they resorted to autocratic styles of maintaining influence and restricted to a large extent staff participation in decisions.

In sum, although IGE emphasized cooperative decision-making, the power relations in many IGE schools did not always promote cooperative decision making and action. In other words, while the IGE model emphasized cooperation, consensus and joint decision making, the actual issues seemed to come down to power: the power of the administration to influence teaching and managing strategies; the power of one member of a unit to impose his/her will on the others; and ultimately the power of the teachers to restrict the freedom of the students (Pettit, 1980, p. 249).

Team Teaching vs. Standardization

Team Teaching. Ironside (1972) found that teamwork was a “problem-area” for teachers during the initial nationwide IGE implementation. Teamwork and unit communication (working, planning, teaching together) comprised a major concern expressed by teachers, and at the same time it was an area frequently indicated as being the most rewarding. Many principals, too, noted unit teamwork as a valued goal accomplished in the first year. The irony was that at the end of the year, 50% of the 700 teachers polled indicated their preference for “doing things as a unit” half the time or less. There might have been satisfaction, but teamwork apparently had only a part-time appeal (Ironside, 1972).

In four multiunit schools of Wisconsin in 1972 (Packard, 1973), key differences among schools in the redistribution of authority appeared to hinge on whether or not unit leaders were appointed. In the one school where unit leaders emerged following a year of experimentation, units were relatively self-reliant, conducted their internal affairs without

assistance for the most part, and carried out their external affairs without gaining clearance from the principal (Packard, 1973). Conversely, where leaders were appointed, 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. Outside the council meetings, the principal was generally consulted to approve many of the activities which the units intended to perform (Packard, 1973).

For many unit teachers in Packard's four IGE schools, collaboration was associated with personal cost as well as with personal gain, as seen in four multi-unit schools of Wisconsin in 1972. Unit teachers collaborated in curriculum development efforts and in preparing new lessons for the unit but did not freely part with personal, independently developed lessons (Packard, 1973, p. 116). While most units had a history free from severe internal rupture and exhibited close interpersonal involvements and relatively intense work relations, some units suffered internal strife. The root issue concerning interpersonal problems seemed to be the degree to which unit decisions bound individual members or subgroups to definite behaviors and approaches. In silent testimony to the growth and course of interpersonal relations among unit members were the "moving desks." When there was rancor, the desks separated, each retreating to a remote corner. When promise continued to grow, the cluster of furniture moved intact to the periphery of the instructional area (Packard, 1973, p. 115).

In Packard's four multi-unit schools of Wisconsin where teachers were expected to share equipment, materials, lessons, space, and children with other unit members, teachers seemed to lack fulfillment and lose pride in ownership of, as well as feelings of responsibility for, classroom events. Since students moved among teachers for classes, the sense of owning children and the rewards from getting close to them seemed diminished. On the other hand, ownership of objects and areas was maintained (Packard, 1973). Drifting away from normal to somewhat novel means of fulfillment was sometimes resisted by teachers as well as cause for parents and others to discredit the team approach (Packard, 1973, p. 116).

In two IGE schools studied by Klenke (1975), the efficient use and sharing of human and material resources through the team's planning efforts was the major

advantage identified by unit leaders and teachers (Klenke, 1975, p. 163). Also, because teaming 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 (Klenke, 1975, pp. 163-164). In contrast, disadvantages associated with teaming focused upon the loss of teacher independence, the additional work load, and the danger of interpersonal conflict among staff members (Klenke, 1975, p. 164).

Unit teachers in Wisconsin’s Harper School felt very strongly the support of their fellow teachers. They thought that IGE provided a framework for them to break out of the isolation of the traditional classroom and become involved in professional discussion with other adults and to receive encouragement and praise. They also enjoyed their role in decision-making, especially their ability to directly influence the operation of the school. While the unit had autonomy in matters such as spending their budget money, it could also participate in overall planning, so that teachers felt involved in the whole, a feeling which strengthened their commitment (Pettit, 1980, pp. 253-254).

The negative perceptions of Harper teachers revolved around two issues: time and class size. IGE seemed to involve far more activity outside the classroom than the traditional system, and these teachers seemed to resent some of the time spent on things like meetings and memos, especially when the results were not directly applicable to the children. Related to this resentment was the consistent feeling that the pace was too quick and that too much effort was being expended for the amount of benefit gained (Pettit, 1980, p. 254). Finally, the Harper teachers felt the contradiction between their wish to be more personal and spend more time with individual students, and the need to have their classes organized into smoothly functioning groups to maintain order (Pettit, 1980, pp. 254-255).

As the Wisconsin Center did not provide enough training opportunities for IGE practitioners to develop specific skills related to shared decision-making, it did not help staff teachers develop skills (e.g., group dynamics skills) to work cooperatively with other team members, and solve interpersonal conflicts. Further, since many of the interpersonal problems were related to educational philosophies and personal traits, participation in a few workshops could not solve the problems. Some teachers who could

not cooperate with other teachers or did not agree with the IGE philosophy were allowed to transfer, but others could not find a place to go. An even more serious problem than interpersonal tensions was standardization of rules and decisions by unit teachers. This standardization is recognized as a dramatic paradox of the IGE movement that promoted quality education by providing for individual differences.

Standardization. Packard (1973) found that in an IGE school all units employed the same report cards, lunch schedule, book lists, meeting routines, class schedules and so on (Packard, 1973). Clearly, administrative problems were lessened and economies of scale were preserved when all units followed the same procedures. Naturally, the innovation embodied a new set of standard procedures which applied equally to all units (Packard, 1973). In schools as elsewhere, service to clients was equated with following the proper procedure. For schools in transition, agreement about what were safe procedures was shaken until or unless criticism was felt and acted upon. Standardization was at least an adaptation if not a solution to, perhaps, the most severe implementation problem these schools faced; i.e., fickle, unremitting, and intense task environment criticisms (Packard, 1973, p. 118).

The team structure at Meadow School (Gitlin, 1980) constrained teachers' work in two basic ways. First, teachers within a team were encouraged to take one standardized position on many curricular decisions and behavioral rules. Second, the team structure made it necessary to specify the time a lesson or topic would take. This not only limited teachers' ability to meet student needs or even complete a lesson but also acted to structure the teachers' day so that it was difficult to incorporate new activities into the specified schedule. By having these time constraints and standardization of rules and decisions, individual teachers were limited in the scope and execution of curricular ideals as well as the way they could approach student behavior (Gitlin, 1980, p. 158).

Non-gradedness

Especially, non-gradedness was the most difficult to achieve among the elements of IGE in all IGE schools because of district requirements with respect to "district reports, tests, and grade level objectives" and community norms that required a comparison of student growth with grade level norms.

As shown in Chapter 7, a teacher at Rocky Mountain said that both parents and county did not want to give up gradedness. The county required reports to be submitted with grades, and parents wanted reports in a graded fashion (Klenke, 1975, p. 108). One parent observed that this non-gradedness may be emphasized but not carried out at Rocky Mountain. Another felt that a lot of parents want to know what grade their children are in (Klenke, 1975, p. 108).

In relation to non-gradedness, criterion referencing was not an assessment practice at Rocky Mountain except within the Wisconsin Design for Reading Skill. In spite of reported benefits afforded criterion referencing, the staff's resistance to its use also arose in association with community norms that required a comparison of student growth with grade level norms. One teacher stated that teachers had to have standards to let children know how they stood in relation to others. A parent reported that parents should not have been required to come and have the score explained because they would 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 (Klenke, 1975, p. 115).

Concerning non-gradedness at Scott, 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 non-graded environment. District requirements seemed to present many of the difficulties in achieving non-gradedness. A teacher outlined these as "district reports, tests, and grade level objectives." 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.

Further, it was found that the central office personnel did not abolish the traditional grade level arrangement for curriculum and other records for students. In order to achieve the goals for IGE, a comprehensive measure to overhaul district regulations regarding graded curriculum and record-keeping was required. However, the school districts seldom changed any rules or regulations for IGE schools; instead, they insisted

on maintaining existing district legal and administrative framework on curriculum and record-keeping. Also, the IGE dissemination/implementation plan did not include a legal mandate to have local school districts as well as state education agencies change their legal and administrative frameworks in tune with the IGE system. This is recognized as another weakness of the IGE Change Model.

Instructional Programming Model

In combination with the multi-unit structure, the Instructional Programming Model (IPM) was created to provide effectively for differences among students in rate of learning, learning style, and other characteristics in all curricular areas (Klausmeier, 1972, p. 48). Contrary to the expectations of the developers of IGE, however, in many schools not only the classic instructional programming model was altered, reduced in some way, but also the pattern of IPM was different within and across units, for example, using the full IPM for some students but not others and stressing some steps in one curriculum but not others (Ironside & Conaway, 1985, p. 127). Moreover, in combination with the unit structure where instructional procedures were standardized under the team teaching approach, patterns of instructional programming in word attack, comprehension, and mathematics reflected common objectives, a common level of achievement, and a common basic sequence with some variation for individual students (Melvin, 1976).

At Alys Drive School (see Chapter 7), the objectives were common, though students might pursue additional activities, especially in comprehension and mathematics, which led to higher achievement or more extensive learning; however, these were not necessarily reflected as the achievement of additional objectives. In addition, the common level of achievement was mastery, defined by a predetermined score, which was also a minimum expectation; however, knowledge that exceeded the grade level expectations in comprehension and mathematics was not reflected in the scores for mastery. This effect of the instructional programming model was conspicuous in curricular areas (e.g., comprehension) where instruction was focused on broad areas, and increasingly higher levels of achievement were expected throughout elementary school. While describing the objectives and expected level of achievement as common for all students states minimal expectations, it did not reflect the variety of additional

learning experiences carried out by many students (e.g., extensive independent reading or research on a specific topic) (Melvin, 1976). Further, the common sequence was related to a strong emphasis on small group instruction. Independent student work was encouraged by many teachers, but this mode was not often used for achieving a given set of objectives (Melvin, 1976, pp. 197-198). In short, although the instructional programming model, along with the team teaching approach, was designed theoretically to permit students to individually advance at their own rates, the reality of the grammar of schooling basically prevented students from having a variety of meaningful learning experiences in many IGE schools.

Ancillary Factors

Ancillary factors that affected the history of IGE include, but are not limited to: inadequate financial support, unionization of teachers, and the physical structures of schools. These factors are categorized as ancillary only because this study focused on the process factors of IGE implementation and the degree of the implementation of two major components of IGE (MUSE and IPM), not because these factors are necessarily ancillary in the history of IGE.

Inadequate Financial Support

In order to move from the traditional structure to the multi-unit structure, financial support was necessary for participation in inservice training, extra pay for unit leaders, pay for instructional aides, and securing new materials. Evers and Klusmeier (1973) conducted a study of 39 schools in eight states to identify any increase or decrease in expenditures during their first year of IGE implementing. They found that schools varied substantially with respect to estimated costs for 1972-73 in the categories of staff costs, staff expenditures, staff development expenditures, instructional materials and equipment, and physical plant and furnishings.

In the area of staff development, the majority of the schools reported an increase in expenditures for inservice materials (the median reported increase was \$250 per school). The majority of the schools indicated an increase in expenditures for workshops and conferences (the median reported increase was \$500 per school). The majority of the

schools reported no increase or decrease in expenditures for consultant services (Evers & Klausmeier, 1973, p. ix). Showing the average expenditures in the first year of IGE implementation, however, Evers and Klausmeier (1973) did not reveal the amounts that were enough for these schools to change over to IGE schools and continue into the phase of institutionalization. Also, given that a number of practitioners indicated lack of financial support for staff development (Gaddis, 1977; Paul, 1974), it is conceivable that many schools required far more than the above amounts to transform their schools into IGE schools.

During the period of 1971-76, 23 states received a total of \$818,500 as grants for implementing IGE in schools or for organizing state IGE networks. Of this total, \$231,250 was awarded by the University of Wisconsin/Sears-Roebuck Foundation Project and \$587,250 was awarded by the R&D Center. The total amount is broken down by year as follows: \$232,000 in 1971, \$236,000 in 1972, \$130,000 in 1973, \$122,500 in 1974, \$100,500 in 1975, and \$37,500 in 1976 (Walter et al., 1976, p. 19). Assuming that the grant was evenly distributed among 628 IGE schools in 1972, one IGE school would have received a total of \$375, a very small amount compared to amount needed for implementing IGE. Some Leagues independently received a grant and used it to hire a few professors for inservice and consultation on IGE implementation.

Financial support was not only inadequate in changing over to IGE schools, but also lack of financial support frequently led many IGE schools to discontinue the program. Some districts did not fulfill their commitment to assist schools in implementing IGE and withdrew district financial support (Gaddis, 1977, pp. 188-198). Due to this withdrawal of financial support, the aides were cut back or completely eliminated from schools, or the student-teacher program was dropped; thus, teachers had a hard time grouping and there was no clerical help for record keeping. In addition, when the district turned down teachers' request for unit leaders' extra pay, other schools dropped IGE (Gaddis, 1977, pp. 192-193).

Unionization of Teachers

The role of teacher unions in implementing IGE varied state by state and school district by school district. In general, teacher unions played a negative role in

implementing IGE while attempting to protect teachers' welfare in a changing environment brought about by IGE. Since the changeover to IGE schools required a fundamental change in teachers' educational beliefs, many teachers expressed directly or indirectly the incompatibility of their philosophies with IGE. One of the most recommended administrative ways to solve this problem was for these teachers to transfer to a traditional school. In some states (e.g., Wisconsin), this transfer was completed without serious problems. In Ohio, however, teachers didn't want to transfer from their school if it went IGE, so they made it an issue with the union. This led the union not to differentiate between non-IGE and IGE in the union contract. Also, the contract provided that there would be no unilateral transfers. As a result, when a principal found a few teachers who did not like IGE, s/he had problems with completing the changeover to an IGE school (Leopold, 1981; Paul, 1974).

In addition, in some school districts, the union contributed to taking an issue over unequal distribution of district funds between IGE and non-IGE schools. Insisting that IGE schools received additional resources, the union successfully created pressure on districts to drop the program (Gaddis, 1977). Moreover, the union did not tolerate release time for unit leaders, let alone extra pay for them. Instead, they demanded that the extra money being spent on IGE be used for teacher salaries throughout the whole district. In some other districts, teacher education institutions only placed their student teachers in IGE schools, so other schools began to complain and the union didn't like the program. This exerted a negative influence on IGE schools in continuing the program (Paul, 1974).

Physical Structure

The multi-unit structure and the Instructional Programming Model were designed to provide for a variety of learning modes (independent study, teacher/pupil, pupil/pupil, small group, medium group, class-size group, and large group). Since providing for various learning modes increased the need for net square feet per pupil of appropriate space, as contrasted with their conventional counterparts, an alteration was required in facilities originally planned and designed for the self-contained classroom approach. Thus, many IGE schools tore down a wall (or walls) to make an open space, while other IGE schools continued to use their traditional school plants but increased the use of

spaces designed for non-instructional functions within their school plants for the activities of learning modes. (Note: Removing a wall was a conspicuously easy task, compared to the difficult task of replacing the traditionally organized school structure with the multi-unit structure by transforming teachers' educational beliefs and role relationships.) Whether they secured an open space or not, IGE schools exhibited diverse space allocations, shapes and space deployment, as well as a diversification of building materials and systems, according to a study of physical structure for twelve Wisconsin IGE schools (six traditional and six open space) (Strand, 1974).

Irrespective of the design characteristic of a school plant, traditional or open, IGE in itself produced increased environmental disruptions. Pupils were constantly moving and engaging in activities which naturally produced more sound. Moreover, this condition was magnified as program implementation progressed. These conditions, along with increased pupil density in certain spaces, all contributed to higher sound levels, and, therefore, a poor sonic environment. The personnel of twelve Wisconsin IGE schools identified this poor sonic environment as contributing the greatest negative effect to the function of all IGE learning modes (Strand, 1974). In addition, when an IGE school started with one curricular area to implement IPM with other curricular areas being taught traditionally, there was increased conflict over classroom space utilization because they also had to accommodate conventional instructional groupings and processes (Strand, 1974).

In general, IGE could be implemented in any school plant irrespective of design features. The design characteristic of a school plant, traditional or open, was not as crucial to the accommodation of IGE learning modes, as was the net amount of "usable" and available space, per pupil, in a facility. (This implies that removing walls was not always in the best interests of IGE.) Thus, any school plant operating with pupil capacity over the design capacity had considerable difficulty in implementing IGE because pupil density within a school plant considerably influenced grouping patterns of pupils, organization schemes for units, and pupil activities in IGE programs. With sufficient commitment, desire, ingenuity, attitudes and resourcefulness on the part of teaching staffs, IGE could be implemented and the learning modes accommodated in school plants irrespective of design features (Strand, 1974, pp. 155-161).

Major Implications

Educational reform, especially a fundamental reform, is rarely implemented as it was intended. As the Popkewitz et al. (1982) IGE study shows, professional interests, social and cultural orientations, and the wider transformations that take place in society at large do not allow for educational reform as planned. In Cuban's terms (1993), cultural beliefs about the nature of knowledge, the mechanism to socialize and sort students into varied socioeconomic positions, the role of policymakers, the organizational structure of the district, school and classroom within which individual teacher's knowledge and beliefs are shaped, and the cultures of teaching, itself, all combine in shaping a durable, practical pedagogy. Tyack and Cuban described this as the grammar of schooling. The hold of traditional forms and practices on teachers and students is strong, often with good reason, and the public tends to share traditional cultural beliefs about what constitutes a "real school." This institutional culture probably has more influence on the implementation of policy than policy has on institutional practices (Tyack & Cuban, 1995, p. 134).

The second implication, derived from the first, is that reformers need to expect that any original plan will be interpreted, modified, and used in accordance with the professional cultures and ideologies which are present within and asserted through institutions, as well as in response to local conditions outside of those institutions. In this regard, advocates of the current nation-wide standards-based curriculum reform movement need to expect a variety of hybrids reflecting different local circumstances. Reformers must expect not only a hybridizing of their models of educational reform, they must also give due weight to teachers' first-hand perspectives on schools and their responsibilities for carrying out official policies. Educational change will likely come from internal changes created by the knowledge, expertise, ideas and values of teachers (Snyder et al., 1992, p. 429). While teachers may use externally designed curriculum and benefit from the stimulation of an "outsider," it is they and their students who create the enacted curriculum and give meaning to it, for they are primarily creators rather than receivers of curriculum knowledge (Snyder et al., 1992, p. 429). At the same time, because most educational reforms make increased demands upon the teacher's limited time and energy, help from outside the classroom is essential in implementing any

planned alteration in basic classroom practices (Cuban, 1995, p. 281).

Third, in order to increase the possibility of institutionalizing a large reform program like IGE, the following implications on change process in each phase of innovation are drawn. First, during the phase of mobilization, staff teachers need to be involved in decision making on the adoption of an innovation; administrators need to see if the staff teachers desire or at least welcome change; change agents need to see if the staff teachers are ready to embark on a reform program; and change agents need to arrange for adequate facilities, materials, and financial assistance as necessary. Second, during the phase of implementation, school district personnel and the principal need to provide ample opportunities for the staff to attend training programs; the principal and the staff need to spend serious time and energy to change their role relationships and expectations in tune with the new program; and the school district needs to provide continued support for staff development, financial aid, and materials. Third, during the phase of institutionalization, continued external support should be provided for school professionals with respect to budget, personnel, service, facility, and materials support; new as well as veteran school personnel need to participate in continued inservice sessions for the program, not only to catch up with but also to refine and renew the program in tune with the local school setting; and staff teachers need to be allowed to modify as necessary the original prototypic model of the reform program in tune with the local circumstances.

PostScript

Losing momentum by the late 1970s, the number of IGE schools decreased. Phillip Geiger, then vice-president of the Association for Individually Guided Education (AIGE), indicated that by 1983, there were 600-1,000 schools that had maintained the IGE label and that roughly 1,000 schools were registered with the Association for Individually Guided Education in Atlantic City, New Jersey (Kremer, 1985, pp. 7, 32). Geiger, however, emphatically believed that IGE was alive and well at that time.

In 1989 when AIGE held its annual convention in Madison, its Board of Directors indicated to Klausmeier that IGE practices were coming back into favor, and that the AIGE membership would be highly interested in learning how IGE practices were faring across the nation. Thus, Klausmeier agreed to conduct a national survey for this purpose. Klausmeier (1992) identified 24 key IGE practices and built them into a “Survey of Elementary School Educational Practices” – not using the term “IGE practices” – that included practices related to each of the seven components of IGE, except continuing research and development. His instructions invited the respondents to estimate the extent to which the practices “are now [1989-1990] being implemented in the elementary schools of your state in comparison with 10 to 15 years ago.” An official of the state education agency, usually the head of elementary education, responded to the Survey.

Based on 37 responses, Klausmeier (1992) indicated that in 1989-90, in comparison with the late 1970s, the respondents checked 23 of 24 practices as being implemented in the same number, more, or many more schools in the majority of the states. Moreover, 14 of the 24 practices were being implemented in more or many more schools of 70% to 100% of the responding states and another five in 54% to 68%. The more and much more widely implemented practices were related to instructional programming for the individual student, curriculum, administration, and district office and state education agency support. Four of the five practices that were not being implemented in more or many more schools of at least 50% of the responding states were related to the organization for instruction; the other one dealt with student advising (Klausmeier, 1992, p. 227).

Klausmeier's study, however, was quite general in asking questions about school practices and did not provide specific information on how many schools were actually following the prototypic IGE model and to what degree, in part because the respondents were state education officials, not principals or teachers. Nevertheless, Klausmeier's study seemed to confirm that the grammar of schooling – the age-graded, self-contained classroom – still persisted during the 1980s. This was evident in the responses to questions about organization for instruction. Only about half of respondents indicated that in about the same number of the elementary schools of the state teachers were divided into teaching units with a team leader and instructional aides.

Bernard Fleury (1993) conducted a follow-up study on the status of IGE in the early 1990s. Trained as an IGE Facilitator by /I/D/E/A/, Fleury contributed to establishing a league of schools in Western Massachusetts and led one of the largest high schools in Connecticut into the IGE fold. He also had successfully adapted IGE processes to the training of pre-service teachers at Westfield State College in Massachusetts between 1976 and 1984. With support from AIGE, Fleury (1993) tried to determine the location and number of elementary, middle, and secondary schools claiming to be IGE schools. However, Fleury (1993) failed to develop a complete listing of IGE schools at that time due to the limited number of responders to his IGE update questionnaire (sent to the AIGE membership/ mailing list).

To develop a context for his unsuccessful survey effort, Fleury (1993) analyzed a variety of education reform proposals made between the late 1980s and early 1990s. The proposals included Steve Benjamin (1989)'s recommendations for educational change, the Cayman Islands Report, the Massachusetts Program for the Certification of Educational Personnel, the Six National Goals (America 2000), the Minnesota Educational Effectiveness Program (MEEP) and the Massachusetts Business Alliance for Education. He found that these proposals all included components of the IGE Principles/Processes/Outcomes and thus maintained that the IGE processes provided the framework and the substance for educational reform that was systemic, transformational, and designed to meet the changing demands of schooling for the 1990's and beyond (Fleury, 1993, p. 13). He also contended that the IGE Principles/Processes/

Outcomes *in toto* presented an integrated system for the effective and continuing transformation of American schools not only at the nursery through Grade 12 (ages 4-19) levels, but at the college level as well, as least in pre-service teacher education programs (Fleury, 1993, p. 11). Fleury's (1993) study of education reform proposals, however, did not address the implementation of the proposals, let alone the implementation of IGE. Further, Fleury's assertion that IGE presented a strong system is largely based on his successful application of IGE to pre-service teacher education programs, as compared to my focus on the elementary education.

Since its establishment in 1973, the AIGE provided IGE schools with facilitative networking environments at the national level until it disbanded in 1995 (Schwartz & Turner, 1995, p. 954). When IGE was felt to be almost dead as a nationwide movement, the AIGE Board of Directors, past presidents and long involved members met the weekend of February 14, 1992 in St. Louis to determine the future of the organization. Dr. Tom Moeller facilitated the retreat. During the weekend the group adopted a vision statement, mission statement, goals and strategies to further the practice of IGE and its components. The participants unanimously supported the idea of continuing the organization. The February retreat was a positive step in redirecting themselves to the organization of AIGE and served to create a foundation for further direction in their operations (Fleury, 1993). However, the AIGE dissolved due in large part to the ever expanding new educational reform movement, i.e., standards-based education movement, and consequently due to the lack of appeal of IGE to the majority of public schools in the 1990s.

I visited the archives of the Wisconsin Center for Education Research in May 1999 to gather documents on IGE. The Wisconsin Center, due to changes in mission and focus, has had four names: Wisconsin Research and Development Center for Learning and Re-education (1964-66), Wisconsin research and Development Center for Cognitive Learning (1967-76), Wisconsin Research and Development Center for Individualized Schooling (1977-82), and Wisconsin Center for Education Research (1982-present). The reader is referred to the website of the Wisconsin Center at www.wcer.wisc.edu. While visiting the archives, the author spoke with a teacher working in an IGE school in McFarland, Wisconsin that had adopted IGE in the late 1960s and was still retaining

much of the prototypic IGE model. In summer 2001, the teacher informed me that IGE was “alive and well” with respect to the major elements of IGE – shared decision making, team teaching/unit organization, and instructional programming model in this 21st century. However, she indicated that the school had to drop multi-aging and go back to straight grades starting in fall semester 2001, due to newly imposed state tests by grades. This case vividly shows that the grammar of schooling is even more strongly supported than before by the current standards-based education movement via state-imposed tests. While supporting the grammar of schooling, this standards-based education movement is likely to remove completely such IGE-related educational practices as multi-aging from the relative handful of IGE schools that have persisted.

For a small number of existing IGE schools in the 21st century, the reader is referred to the following selected websites:

- (1) <http://www.ims.columbia.k12.mo.us/rwe>;
- (2) <http://www.memphismagazine.com/backissues/august1999/education.htm>;
- (3) <http://www.comey.com/edu.html>;
- (4) <http://www.seekon.com/L/US/MO/Columbia>;
- (5) <http://ns1.esu8.org/~stmarys/school.html>.

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Appendix A

Forms Used in Formal Agreements at National, State, and District Levels

<p>MEMORANDUM OF AGREEMENT BETWEEN THE REGENTS OF THE UNIVERSITY OF WISCONSIN AND _____</p>

This agreement enumerates the conditions and responsibilities that will exist between the University of Wisconsin as represented by the Wisconsin Research and Development Center for Cognitive Learning (Center) and _____ (Intermediate Agent and/or Subcontractor) concerning the installation and maintenance of Individually Guided Education in Multiunit Elementary School (IGE/MUSE-E) in a nationwide network.

- I. The R & D Center agrees to:¹
- A. provide financial assistance to _____ in the sum of _____ for assisting in the implementation and operation of _____ multiunit schools in the state of _____ by September 15, 1971. If that number of multiunit schools is exceeded by 10 or more, prior to April 15, 1972, additional payments of \$4,000 will be made for each additional unit of 10, up to an including a total of _____ schools.
 - B. Financial Assistance as specified in #1 above will be paid on the following schedule:
 - July 1 – 25% based on number of schools committed as of June 15
 - October 1 – 25% based on MUS-E schools operating September 15
 - February 1 – 25% based on MUS-E schools operating January 15
 - May 1 – Balance based on MUS-E schools operating April 15
 - C. plan and cooperate the national network program.
 - D. plan and conduct a 1-week invitational institute at Madison, Wisconsin, for personnel from state educational agencies, cooperating teacher education institutions and large school districts who may supply IGE/MUS-E inservice education to staffs of local schools during 1971-72. (The Center will pay the travel and provide a stipend in lieu of living expenses for persons invited to

¹ These conditions are described in detail for the 1971-72 school year and will be continued into the 1972-73 school year contingent upon the installation of new MUS-E schools by the intermediate implementation agency and continued funding by the U.S Office of Education.

this institute.)

- E. identify and announce the teacher education institutions selected to conduct 1-week workshops and on-campus graduate programs for experienced unit leaders, building principals and reading staff teachers of MUS-E.
 - F. arrange for the Intermediate Implementation Agency and/or local schools to rent or purchase specified inservice audio-visual and printed materials related to IGE/MUS-E and those related to the Wisconsin Design for Reading Skill Development.
 - G. accept requests for consultant assistance to the intermediate agency and to the local school districts during the year and to respond positively to such requests within time and budget limitations.
 - H. encourage local school districts and state agencies to use Title I, III, and other funds as appropriate to provide new MUS-E schools \$10-20 per child.
 - I. provide assistance for the development of IGE/MUS-E teaching and operational skills for building personnel. This will include scheduling and conducting R & D Center sponsored 1-day IGE/MUS-E workshops for chief school officers, 3-day IGE/MUS-E workshops for prospective principals and unit leaders and a 1-week IGE/MUS-E workshops for reading consultants during the initial year (1971-72) implementation.
- II. The Intermediate Implementation Agency agrees to:
- A. install the number of multiunit schools stipulated in Section I, paragraph A of page one of this memorandum between April 1, 1971, and May 31, 1972.
 - B. utilize the financial assistance specified in Section I, paragraph A of page 1 to employ personnel to assist in the implementation of multiunit schools and/or to provide support (secretarial, travel, supplies, etc.) related to such efforts as indicated in a budget to be submitted to the Wisconsin R & D Center and attached to this agreement.
 - C. to present evidence by September 15, 1971, of the employment and/or assignment of staff as necessary (one or more FTE) to coordinate and to be responsible for the installation and operation of the stipulated number of

multiunit schools.

- D. provide supporting services (secretarial, copying/duplicating, etc.) to the staff responsible for the installation and operation of MUS-E.
- E. cooperatively with the R & D Center installation coordinator develop a brief implementation plan by June 1, 1971, which includes the names and characteristics of the schools that are planning to start in early 1971-72 and a timetable for implementation of the inservice program.
- F. obtain a signed agreement with each cooperating school concerning the conditions specified in the intermediate implementation agency-school agreement.
- G. participate in an Office of Education evaluation plan to be conducted independent of the Wisconsin Center.
- H. carry out the inservice program insofar as length of institutes and target populations suggested by the Wisconsin Model on a best effort basis.
- I. arrange consultation assistance to local schools of at least one-half day per month for each of the IGE/MUS-E schools in the state. This includes two 1-day workshops (or equivalents in half-days) during 1971-72 for the entire staff of each MUS-E school.
- J. seek to establish cooperative working relationships with teacher education institutions in preparing MUS-E professional personnel as well as to provide teaching interns for MUS-E buildings. A desirable standard is the placement of no more than two interns per 150 children, and that no more than one teacher education institution supply an intern to a particular MUS-E building.
- K. Stimulate and demonstrate the appropriate use of specified MUS-E inservice materials with either the unit staff or with the entire building staff during the school year.
- L. Provide during the second semester 1971-72:
 - 1. greater initiative in terms of personnel, materials, and program for the intensive 3-day workshop for prospective principals and unit leaders who plan to start multiunit schools in 1972-73.
 - 2. personnel, materials, and programs for quarterly, regional, 1-day

workshops for principals and selected unit leaders (self-help in nature).

- M. Send the state coordinator and one other person to the R & D Center sponsored institute for agency personnel in June 1971, specified in Section I, paragraph D of page two of this memorandum.
- N. identify and select experienced principals, unit leaders, and reading teachers who should attend 1-week MUS-E institutes specified in Section I, paragraph E of page two, during the second semester 1971-72, summer 1972, and thereafter as openings are available. The R & D Center will inform each intermediate agency of openings to the various institutes inasmuch as funding is not sufficient to provide for all experienced personnel.
- O. communicate to all schools in the state descriptions of the activities of MUS-E schools and the nature and substance of MUS-E institutes through agency bulletins, conferences, in-house publications, and other sources.
- P. report to the Center in October 1971 and May 1972, any substantial deviations from the agreed upon inservice program that may have occurred.
- Q. report to the Center by May 1, 1972, any difficulties cooperating multiunit schools are having in meeting the performance objectives as outlined.
- R. plan with the R & D Center coordinator during the second semester 1971-72 for the maintenance of the existing multiunit school during 1972-73 and the starting of new schools during 1971-72.
- S. encourage the reading consultant of the local school district to work closely with each multiunit school that plans to start using The Wisconsin Design for Reading Skill Development during 1971-72.²

² One to four months of planning a school year by the building staff with inservice assistance from a reading consultant is needed before a school can start using The Wisconsin Design for Reading Skill Development effectively.

PROTOTYPE
MEMORANDUM OF AGREEMENT BETWEEN
INTERMEDIATE IMPLEMENTATION AGENCY AND
ITS PARTICIPATING SCHOOL DISTRICTS

The Intermediate Implementation Agency agrees to:

1. provide consultative help of at least one-half day per month per school during the first two years of program implementation. This includes consultative help for two 1-day (or half-day equivalents) inservice sessions for the staff of each MUS-E.
2. conduct (after 1971-72) three-day workshops for prospective principals and unit leaders for 1972-73 with minimum assistance from the R & D team.
3. encourage each building staff to use inservice materials appropriately.
4. assist in securing interns and/or student teachers from cooperating universities for school systems desiring them.
5. provide for communication (newsletter or other forms) among multiunit schools, teacher-education institutions, and other appropriate agencies. (The Center has formed a statewide council in Wisconsin comprised of representative lead teachers, building principals, and central office personnel of each school district. Within the State, the DPI has formed four subgroups of communicating school and teacher education institutions.)

Each Participating School District agrees to:

1. assess present teachers and other school personnel relative to their inclusion in a multiunit school program.
2. make necessary arrangements to include only compatible staff members in each unit and school. Allow those who do not wish to participate to transfer without prejudice to another building.
3. designate one person in the district to be responsible for successful operation of MUS-Es.
4. Provide funds for staff to attend necessary workshops and inservice programs.
5. (Desirable if time sequence allows.) recognize, prior to implementation, the importance of a well-planned local inservice education program to retrain staff. It is

strongly recommended that during the second semester the principal and unit leaders conduct an inservice program. Minimum amounts of time which are recommended to develop the multiunit elementary school concept are listed below:

February	4 hours	April	4 hours
March	4 hours	may	4 hours

6. hold a 3-5 day workshop for the staff of each building in late August or early September of 1971 for the purpose of developing IGE in one subject-matter area.
7. hold two 1-day (or 4 one-half day equivalent) workshops for the staff of each building during the 1971-72 school year.
8. Implement a minimal standard in the following categories:
 - a. Organization
 - (1) Multi-age/grade Units.
 - (2) Aide(s) for each Unit.
 - (3) Unit leaders, with released time for planning and salary about 10 per cent above staff teacher of the same experience and education.³
 - (4) An Instructional Improvement Committee (IIC) and delegate decision-making powers related to instruction to them. Make provisions for the IIC to meet regularly each week.
 - (5) 2-3 hours of Unit (cooperative team) planning time per week during the school day.
 - b. Curriculum
 - (1) Implement IGE instructional programming in at least one subject-matter area during the first year of implementation.
 - (2) Grant each building permission to use appropriate instructional materials and assessment procedures in IGE subject-matter areas, based upon needs of their children, that includes these components:
 - (a) Performance objectives.
 - (b) Assessment for objectives.
 - (c) Diversified learning activities.
 - (d) Post-assessment and evaluation.

³ Where contracts have already been negotiated this may not be possible until 1972-73.

c. Parent Communication

- (1) Implement a planned program of parent communication.

Vita
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The Pennsylvania State University, Ph.D., Curriculum and Instruction, 1997-2001

The University of Kansas, Ph.D. student, Curriculum and Instruction, 1997

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Curriculum Evaluation, Summer 2000, Summer 2001

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Assessment Consultant, The Schreyer Institute for Innovation in Learning, Pennsylvania State University, 1999–2000

Teaching Assistant, The University of Kansas, Lawrence, Kansas
Media and Microcomputers in the Classroom, Spring 1997

Lecturer, Chongju Teachers College, South Korea
Introduction to Curriculum, Spring and Fall 1996
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