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ELEMENTARY SCHOOL PRINCIPALS AND THE PROCESS
OF CURRICULUM IMPLEMENTATION

BY

KISSONPERSAD BINDA

A thesis submitted to the Faculty of Graduate Studies of
the University of Manitoba in partial fulfillment of the requirements
of the degree of

DOCTOR OF PHILOSOPHY

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Mrs. Nazrah Binda transcribed the tapes and typed the manuscript. To my parents who made tremendous sacrifices for their children's education, I dedicate this thesis.

ABSTRACT

The purpose of this study was to examine how principals proceed with the process of implementing new/revised curricula in elementary schools. A sub-objective was to determine how beliefs and assumptions about knowledge, knowing, teaching and learning influenced the implementation process.

The research project utilized an interpretive approach based on Werner's Conceptual Framework, because of its ability to provide "thick" data on the process of implementation. A semi-structured interview guide facilitated data collection from principals and a teacher from each school in a division over a two month period. Unstructured observations provided additional data. Data analysis utilized qualitative methods and the "critical incident technique."

The study revealed that principals are concerned about curricula meeting the needs of pupils and, therefore, spent a great portion of their time implementing the new/revised curricula, upgrading themselves and their staffs, providing materials, modelling instruction, modifying administrative structure, and providing leadership. Principals relied heavily on additional change facilitators - staff members or consultants, and prioritized curriculum implementation on the basis of

central policy, contextual factors, and their perspectives about curriculum.

New curricula posed problems for integration into the regular school programs; the problems ranged from physical limitations to entrenched pedagogical practices. However, through negotiations, the creation of a positive climate, high collegiality and a sense of efficacy, a high level of implementation was achieved. Students were observed to read better, write better, learn more independently, develop a better self-concept and gain a more positive and confident outlook. It was surmised that "deep" implementation took place along with some "surface" implementation. Principals were viewed as "facilitators" and about half were considered "initiators". All showed some aspect of instructional leadership.

Several recommendations resulted from the study. First, Werner's framework is insightful, but needs further refinement. Second, further study is required to measure the extent of "deep" implementation and the extent to which less prioritized curricula are neglected or implemented. Third, divisions should allocate additional resources for professional development, particularly during the early implementation phase. Finally, innovative curricula should be introduced in small, phased amounts, rather than on a large scale over a short period of time.

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CHAPTER ONE

INTRODUCTION

Theoretical Background for the Study

Despite the massive curricular reforms of the 1960's and 1970's, it is now recognized that many of the recommended changes did not have an effect in the classroom. What took place "behind the classroom door" (Goodlad, Klein and Associates, 1970) was not what developers of these new curricula intended. (Fullan, 1982; Hunkins, Ehman, Hahn, Martorella and Tucker, 1977; Leithwood and Hughes, 1981; Welch, 1979).

It generally was assumed by policymakers and developers that new curricula would be more relevant, more productive and more suitable to the needs of students (Farrar, De Sanctis and Cohen, 1980), and that these curricula would be implemented in the prescribed manner in the schools by the principals and teachers. The literature referred to in the first paragraph above suggests that this does not appear to have happened. Why did many of these programs fail to take hold in the schools?

Many explanations have been advanced. Gross, Giaquinta and Bernstein (1971) observed that most innovations failed in their implementation stage largely because the field of implementation was conceptually poor

and drastically underdeveloped. Berman and Mclaughlin (1976) for example, suggest four possibilities.

- 1) New practices could not be expected to make a difference as schools are at a juncture where they are already having the maximum possible effect.
- 2) Innovative ideas are inadequately developed.
- 3) Changes in student outcomes have occurred, but measurement strategies are inappropriate.
- 4) Innovative practices are not implemented as planned by developers.

A number of other researchers (Aoki, 1983; Benham, 1977; Frand, 1977; Fullan, 1982; Goodlad, 1977; Leithwood, 1982; Meyer, 1983; Werner, 1983) theorize that the failure of the reforms to take hold in classrooms was due to fundamental philosophical differences between those who proposed change and those who were to implement it. They advanced the proposition that schools operated largely within a traditional and deterministic framework while the changes were largely reflective of a philosophy housed in a contemporary and relativistic rationale. Conflicts between these two belief systems, it would appear, negatively affected the proposed curricular changes and prevented them from being fully implemented. For example, Goodlad (1977), faulted the use of the research, development and diffusion model. Others

(Chittenden and Bussis, 1979; Havelock, 1969; Tikunoff, 1980) showed similar sentiments. Smyth, (1981) frankly contended that the research, development and diffusion model impeded curriculum implementation efforts in the classroom.

These critics claimed that the proponents of the research, development and diffusion model as an instrument of change viewed school personnel, the crucial people responsible for the curriculum implementation, as passive recipients rather than active partners. As recipients they were expected to comply with directions and mandates to implement changes in the classrooms or, at worst, to resist mildly.

It is quite clear that personnel operating within this model failed to take into account that each school has what Sarason (1971) termed a "culture". This "culture" or "ethos" (Rutter, Maugham, Mortimer, Ouston and Smith, 1979) strongly influences the manner in which the school functions or operates. Firestone and Wilson (1984) observed that the culture of the school was a key to more effective instruction, while in the business world a similarity was observed by Peters and Waterman (1982). Peters and Waterman noted that the organizational culture was the key to organizational productivity. To neglect this "culture" or "informal covenant" (implicit

agreements that help the system to function smoothly), seemed to be courting danger particularly where change was concerned (Parish and Arends, 1983).

Developers appeared to have taken the perspective that innovation was a rational process (Schmuck and Miles, 1971) and that the implementors, i.e. the principals and teachers, were not rational. Consequently, developers took an overly technical view of the process and proceeded to design and prescribe "teacher-proof materials", materials that school personnel would merely implement in the classroom regardless of the context in which they were to be implemented. Goodlad (1977) described this concept very well:

To think that personnel engaged in research, development and diffusion can change the school by injecting into it some new ingredient, however attractive rationally, is to seriously misjudge the problem of change (p. 97).

The heavy emphasis on rationality was based largely on the expectations of a technological society. The technological society through its emphasis on "product" posited education as a unidirectional process and failed to view the individual as a unique human being having a unique personality, values, personal experiences and desires. In short, it failed to consider that a person's construct system - values, perceptions, understandings, beliefs - define how that person viewed the world and

acted upon it.

There is a body of literature that views reality as being socially constructed or invented by individuals. Berger and Luckman (1967) defined reality as "a quality appertaining to phenomena that we recognize as having a being independent of our own volition" (p. 1). One simply cannot wish them away. Allport (1955), cited in Bussis, Chittenden and Amarel (1976), traced the origins of the influence of modern phenomenology to the views of Liebnitz that the human "mind is active, purposeful and intentional" (p. 13). This being the case, then the notions of curriculum change that were only rational were doomed to failure from the start. And many of the new curricula that were developed followed the scientific-rational model.

Implementors were viewed by curriculum developers as being non-rational. But there is no reason to believe that the principals or teachers who rejected these curricula were non-rational. Both implementors (i.e., principals and teachers) and developers may be rational but from different perspectives or from different belief systems (House, 1979).

Werner (1981), has explored the problem of curriculum implementation from a phenomenological perspective. He thinks that a person's belief system

about knowledge and knowing, expectations about the nature of teaching and learning, and about values of what is important in the classroom are all crucial factors in the curriculum implementation process. He has suggested that:

Everyone involved with an innovation may not share the same assumptions, values, expectations and as a consequent interpretations of the situation. As a social process, therefore, implementation occurs as participants interpret these beliefs in the context of school situations, background experiences and educational commitments (p. 137).

If the implementing personnel do not interpret the intents, activities, or materials as being relevant to their own situation in the classroom (i.e. fulfilling a perceived need on the implementor's part, Goodlad, 1975; Twain, 1983) it is very likely that the curriculum will be resisted (Miles, 1964a), abandoned or drastically modified. Major adaptation, rather than implementation, would take place. This seems to have been the case in many instances (Fullan, 1982). If this line of thinking is correct, it suggests that many ways of thinking about implementation are misleading.

Perhaps different assumptions are needed to explain the curriculum implementation process. One way to discover such differing assumptions and develop better theory is to go to the experience of teachers and principals in the schools. Seeking theories on how

principals and teachers construe their situations within the school culture may help to understand the process of implementation better. Such understandings and "grounded theory" (Glasser and Strauss, 1967) may eventually help to better manage the curriculum change process in schools and consequently the task of schooling.

Purpose of the Study

In Manitoba, curriculum revision, development and implementation are spearheaded by the Curriculum Development and Implementation Branch of the Department of Education. (See Chapter Four for a more detailed description of this process). Work has taken place at a rapid pace in the last seven years. Programs at all levels were identified for revision (See Fig. 1). These revised programs/curricula are mandated for use in the schools of the province and school boards turned over implementation to the schools. These new and revised programs are currently being implemented in schools in the Province of Manitoba but as yet little is known about the effectiveness of these programs, the nature of the reception accorded them and, particularly, the process whereby principals facilitate the implementation of these curricula.

Schools operate under the direction of a principal. It

FIGURE 1. CURRICULUM STATUS

Area	CURRICULUM DEVELOPMENT				CURRICULUM IMPLEMENTATION			
	Current Status of Curriculum Guides	Feedback and Pilot Classes	Interim Guide	Final Document	Interim/Preparation Year(s)	General Adoption	Implementation	
Goals and Objectives K-12	Complete							
Mathematics 100, 101, 104 200, 201, 204 300, 301, 304	Revision complete In preparation In preparation	1981-82 1982-83	1982-85 1984-86	Sep., 1982 Sep., 1985 Sep., 1986	1981-82 1982-85 1983-85	Sep., 1982 Sep., 1984 Sep., 1985	1981-84 1982-85 1983-86	
Science 100, 101 200-300 Chemistry 200-300 Physics 200-201/300-301 Biology 201-301 Physical Science	Revision complete In preparation In preparation In preparation In preparation	1981-82-83 1982-83-84 1982-83-84 1983-84-85	1983-85 1984-86 1985-88 1985-88	Sep., 1982 Sep., 1985 Sep., 1986 Sep., 1988	1981-82 1983-84 1984-85 1984-85 1985-86	Sep., 1982 Sep., 1984 Sep., 1985 Sep., 1985 Sep., 1986	1981-84 1983-86 1984-87 1984-87 1985-88	
English Language Arts* K-8/9 9/10-11 12	Revision complete In preparation In preparation	1982-83 1983-84	1983-85 1984-85	Sep., 1982 Sep., 1985 Sep., 1985	1981-82 1983-85 1984-85	Sep., 1982/84-85 Sep., 1984/84-86 Sep., 1985/86-87	1981-85 1983-86 1984-87	
Social Studies* K-6 7-9 10-11 12	Revision complete In preparation In preparation In preparation	1981-82 1982-83 1984-85	1982-85 1983-86 1984-87	Sep., 1982 Sep., 1985 Sep., 1986 Sep., 1987	1981-82 1982-84 1983-85 1985-86	Sep., 1982 Sep., 1984 Sep., 1985 Sep., 1986	1981-85 1982-86 1983-87 1985-88	
Music 10-12	In preparation		1983-86	Sep., 1986	1983-84	Sep., 1984	1984-85	
Art K-9 10-12	Revision complete In preparation	1985-86	1986-88	Sep., 1983 Sep., 1988	1982-83 1986-87	Sep., 1983 Sep., 1987	1982-85 1986-88	
Physical Education K-12	Revision complete			Sep., 1981	1980-81	Sep., 1981	1981-84	
Health K-9	In preparation	1981-83	1983-86	Sep., 1986	1983-84	Sep., 1984-85	1984-87	

Continued next page

FIGURE 1 Continued

Occupational Entrance 7-9 10-12	In preparation In preparation	1982-84 1983-85	1984-87 1985-88	Sep., 1987 Sep., 1988	1983-84 1984-85	Sep., 1985 Sep., 1986	1983-86 1984-86
Business Education	Revision of most subjects complete			Sep., 1982		Sep., 1982	1981-84
Industrial Arts/Home Economics 7-9	Revision complete			Sep., 1983		Sep., 1983	1983-84
Home Economics 10	In preparation	1985-86	1986-88	Sep., 1988			
Home Economics 11	In preparation	1986-87	1987-89	Sep., 1989			
Home Economics 12	In preparation	1987-88	1988-90	Sep., 1990			
Industrial Arts 10-12	Curriculum guides to be reviewed on a cyclical basis.						
Computer Awareness 105 K-9	In preparation In preparation	1982-83 1983-84	1983-86 1984-87	Sep., 1986 Sep., 1987	1984-85	Sep., 1984 Sep., 1985	1984-87 1985-87
Computer Science 205 305	In preparation In preparation	1982-83 1983-84	1983-86 1984-87	Sep., 1986 Sep., 1987	1983-84 1984-85	Sep., 1984 Sep., 1985	1984-86 1986-88
Lifestyle Studies	In preparation	1982-83	1982-86	Sep., 1986		Sep., 1983	
Heritage Languages	Curriculum development continues in English-Ukrainian, English-German, and English-Hebrew programs. Revision of Ukrainian as a second language also continues. Additional languages in initial planning stages.						
Vocational Education	Curriculum guides are being reviewed on a cyclical basis.						

INTERIM: One or more preparatory years prior to adoption.

ADOPTION: Utilization of revised curricula, initial purchase of support materials.

IMPLEMENTATION: Continuing in-service and addition of materials.

(*) Interim K-12 Level 1 guide to serve as the basic revision document until details of high school sections are complete.

SOURCE: EDUCATION MANITOBA, SEPTEMBER, 1984.

is assumed that the principal will play a pivotal role in the implementation of the new or revised curricula. This assumption stems partially from the common-sense belief about the status and role traditionally accorded the principalship, (Lipham and Hoeh, 1974) as well as from recent research findings such as the school effects literature. (See for example, Clark, Lotto Astuto, 1984; Clark and McCarthy, 1983; Edmonds, 1982; Lieberman and Miller, 1981; Purkey and Smith, 1982, 1983, 1985, among others).

Manitobans are aware of the crucial role played by the principal. A province-wide study (Lee and Wong, 1985b) by Manitoba Education designed to examine the curriculum implementation process "as it operates in Manitoba" reported that "approximately three-quarters of principals believed that they should be involved in ... implementing curriculum guidelines" (p. 10). What are these beliefs and how are they operationalized? The study also noted that,

Suggestions regarding the appropriate and realistic roles of the school principal in the curriculum implementation process would be useful to teachers, division and administrators and to principals themselves (p.10).

What are these roles? How does the principal go about the process of implementing new curricula? How do beliefs about the "world of the classroom" influence the

principal's intervention process? How effective in facilitating implementation are those processes? These questions remained unanswered and need further exploration.

It is assumed that the principal as a middle manager plays an important role in the curriculum implementation process. While research on implementation is relatively new, research on what the principal actually does in the curriculum change process has hardly begun (Fullan, 1982). It is therefore apparent that the need exists for inquiry into how principals go about the process of curriculum implementation. This study acknowledges this need.

The purpose of this study is to examine how principals perceive and go about the process of implementing new or revised curricula in the elementary schools of a school division in the Province of Manitoba.

A sub-objective is to determine whether the process of implementation varied among principals and to what extent values, beliefs, assumptions about knowledge and knowing, teaching and learning about the world of the classroom influenced such variations in the curriculum implementation process. In this study curriculum implementation is defined as the process whereby schools introduce new or revised curricula into the classrooms thereby altering existing

educational practice in order to achieve more effective learning outcomes for students.

Research Questions

The research questions guiding this study paralleled Werner's (1981) conceptual framework. An outline of the framework is shown in Figure 2.

Figure 2. Outline of Werner's Framework

Why Change? (The Rationale)
What are we asked to Implement? (The Curriculum)
What is really new? (The Innovation)
What aspects of Current Practice will be
Affected by our Using this Curriculum?
(The Implications)
How does the Curriculum Fit in with Other
School Programs? (The Articulation?)

Source: Werner, 1981.

Werner's framework was developed on the basis of experiences educators underwent when they were confronted with the implementation of an innovation. Werner's conceptual framework is essentially an interpretive approach to curriculum implementation. The framework not only looks at the curriculum implementation process, but it gets at the heart of the problem. It looks at how personal constructs - an individual's beliefs, values and assumptions - mediate the curriculum implementation process. The framework was developed in British Columbia and validated

throughout that province with educators. A more detailed description is found in Chapter Three. Following is an outline of the research questions to be considered for this study.

Research Questions

- 1) What (a) are the curricular intentions of the principal, how does s/he feel about (b) what is in place, (c) what needs to change or (d) what needs to stay the same?
- 2) How does s/he feel about the new program and how do these feelings influence the implementation process?
- 3) What is the overall strategy for implementation?
- 4) What aspects of current practice are affected?
- 5) What organizational changes are required?
- 6) What are the priorities; how are these decided; and how are they staged over time?
- 7) What resources are required? How are these obtained and allocated?
- 8) What kind of bargaining goes on between principals and teachers?
- 9) How does the new curricula fit in with other school programs?
- 10) What are the effects of the new curricula on students and staff?

Significance of the Study

Educational practice is in need of further conceptualization and theoretical speculation that relate to the process of curriculum implementation, for it is precisely at this stage, as stated in the literature, that the curriculum innovative process breaks down.

An increasing volume of current research has identified the principal as a crucial factor in the curriculum change process. Some of this research also has identified the role of beliefs, values and assumptions regarding the "world of the classroom" as having influences on the curriculum implementation process. The majority of research, however, has focused on leadership. Much of this research has revealed a remarkable lack of specificity with regard to how the principal actually goes about the process of implementation. Moreover, studies on how belief systems of implementors mediate the process of curriculum implementation are also lacking. This study is significant in that it provides some specificity in the identification of the processes undertaken by principals as they proceed implementing innovative curricula. It is hoped that this study will help fill this void, while at the same time will help improve our understanding of theory on the principalship, of change, and of the process of curriculum implementation. More specifically, it is hoped that this

study will help to improve the educational practice through the empirical examination of curriculum implementation and the role played by the principal, one of the most crucial participants, in the curriculum implementation process.

This study is of further significance given the fact that any curriculum innovation involves significant expenditures of human and financial resources. In light of the large volume of new curricula coming into the schools and the limited resources available, the community at large can ill afford the massive failures at innovation experienced in the nineteen sixties and seventies. The curriculum implementation process, therefore, has become increasingly significant both for practice and for the field of research as well. It is through such research that understanding of the curriculum and education process is improved.

Another significant factor is that this study utilizes a conceptual framework developed in the Canadian context on the basis of Canadian experience and practice. Since the majority of the research emanating in the field comes from foreign sources, the significance of the study in the Canadian context is perhaps increased as new curricula are currently being implemented in the province of Manitoba.

Overview of the Method

This research intends to examine how principals go about the process of curriculum implementation in a school division in Manitoba. Consultation with principals led to the study utilizing the interview method. This study adopted a two-pronged approach:

- 1) What the principal says he/she does.
- 2) What selected teachers say the principal does.

All principals in a selected division were targeted for interviews as well as one teacher selected from a group of volunteers from each school for participation in the study. A semi-structured interview guide representing five clusters of concern about implementation was the main instrument used for the study. The modified interview guide was based on the framework developed by Werner (1981) and validated by various educators throughout British Columbia. The modified guide was tried with two practicing school principals in Manitoba and found to be suitable for the study. Principals and teachers were interviewed individually for approximately one to two hours in their schools. The interviews were recorded on magnetic tape for later transcription. Data analysis consisted of an examination of the interview transcripts and the use of qualitative methods and the "critical incident technique" as described by Flanagan (1954). Analysis of the data was conducted on two

separate levels. The first level clusters and summarizes the data into descriptive categories derived from the research and interview questions. The second level is more exploratory. At this level the researcher examines the summarized data, firstly looking for patterns and relationships that were emerging and also prompted speculation about these and their relationships to the available theoretical literature concerned with how principals go about the process of curriculum implementation.

Organization of the Study

The study is organized into six additional chapters. Chapter Two reviews the available literature to examine how principals go about the process of curriculum implementation. Chapter Three discusses the methodology of the study. The method adopted consists of four main phases; the selection of subjects, the selection of an instrument, conducting the interview and an analysis of the data.

Chapter Four is concerned with the curriculum development-implementation process in the Province of Manitoba. Chapter Five discusses the findings of the first three clusters of questions from the interview guide. The first three question clusters deal with the philosophical and structural aspects of the actual process of implementation.

Chapter Six deals with the last two clusters of questions from the interview guide. The focus is on the actual implementation process and the effects of such implementation. Chapter Seven concludes the study by summarizing the results and by suggesting implications for educational practice and further research.

CHAPTER TWO

REVIEW OF RELEVANT LITERATURE AND RESEARCH

Research on innovative change in education points to the emergence of the elementary school principal as a crucial factor, and a major determinant in the successful implementation of educational innovations. This chapter will review the available literature in order to examine how the principal goes about the process of curriculum implementation. The place of the principal in the school system will be examined; the role of need identification and curricula characteristics in implementation; and, finally school level factors under supervision of the principal will be reviewed.

Method of Literature Review

The review of the relevant literature and research is based on the basic outline of Werner's framework and the research questions which closely parallel that framework. A skeletal outline of Werner's framework was introduced in Chapter One and will be elaborated in Chapter Three. Five categories of studies were consulted and these have been integrated into the review. The types of studies are:

- 1) theoretical studies of research on innovation, school change and curriculum implementation including

implementation of innovative programs (already introduced in Chapter One and reemphasized where appropriate in Chapter Two);

2) studies on individual construct systems which represent a person's knowledge and view of the world and how these perceptions and beliefs mediate the innovative process;

3) studies that deal with the role of the principal which include beliefs, instructional leadership, managerial behavior, staff development, planning and decision-making;

4) studies on school effectiveness that highlight the principal as an important factor in the implementation of school programs;

5) and, studies of organization and administrative theory which relate to principal behavior and to curriculum implementation efforts in the classroom.

Efforts to locate studies were extensive and included Eric searches, various Abstracts and Indices. Studies were limited mainly to those conducted in Canada and the United States, though a few studies from outside North America that were accessible were reviewed, for example, the United Kingdom, Australia and New Zealand.

The studies selected represented a variety of methodological approaches and designs - case studies, field studies, ethnographic studies, theoretical studies, conference studies and experimental studies. Most of the

studies, however, were observational and case studies. No attempt was made to cull studies on the basis of methodological design; rather, selection was based upon appropriateness and relevance to the research problem; that is, the studies were selected on the basis of whether they contributed to the understanding of the process of implementation. An attempt was made to organize a description of the data in a manner that would yield insights into the way principals as key persons, go about the process of curriculum implementation. The following outline summarizes the organization of the chapter.

The principal: The Key to Curriculum Change or Implementation.

The Principal and the Rationale for Change in the Process of Curriculum Implementation.

The Principal and Characteristics of the Curriculum.

Compatibility

Complexity

The Principal: Personal, Organizational and Institutional Variables in the Implementation Process.

Structure

Principals' Managerial Behavior

Instructional Leadership

Staff Development

The Principal's Planning, Decision Making and

Implementation Strategies.

Summary.

The Principal: The Key to Curriculum

Change/Implementation.

The school effects literature reiterates again and again the pivotal role of the principal in school effectiveness. Even before school effects studies became the leading edge in the research domain (Erickson, 1979) principals were recognized for their traditional importance in the school system. Today, even though the role and demands of the principalship have changed considerably (Dill, 1984), school effects research suggests that the principal is becoming even more crucial as a middle administrator and instructional leader in the school system. In Manitoba, a brief report on the implementation of the new elementary social studies and Grade Ten Science Curricula (Lee, 1985) observed that the principal was a crucial actor in the process of curriculum implementation. Lee and Wong (1985a) made essentially the same observation in another report published by Manitoba Education, noting that, "it is evident that administrative support and knowledge can assist the implementation process" (p. 14).

Since principals are identified to be crucial persons in the school, it is expected that they will be the key to

implementing curriculum changes in the school. But critics of the managerial perspective made it clear that curriculum implementation was not simply a managerial problem and that improvement of the managerial system may not achieve the correspondence sought, for the process of curriculum implementation is a more "complex dilemma-ridden, technical, sociopolitical process" (Fullan, 1985, p. 391) than the management perspective suggested. Involved in the process of curriculum implementation are complex social and political processes such as negotiations and informal covenants that take place between teacher and principal, between principal and superintendent and even between principal or teacher and the community (Common, 1981; House, 1974; Krueger and Parish, 1982; Lipham and Hoeh, 1974; Meyer, 1977; Parish and Arends, 1983). All during this process covert insubordination occurs between teacher and principal (Morris, Crowson, Hurwitz and Porter-Gehrie, 1982). However, all of these processes are in the context of rational processes (House, 1979) that allow for the smooth functioning and operation of the school without confrontation with the authority.

Watson (1980), in an address at the 4th Commonwealth Conference in Education Administration, described this insubordination process more explicitly when he stated:

Many teachers and principals will in fact ignore

the rules or bend them frequently. Thus much of the curriculum actually taught and received by pupils, is far from that specified in formal documents (P. 238).

As well as the complex social interactions observed by Watson and others mentioned above, the literature on management also points out that bureaucratic managerial procedures do not always function smoothly in innovative situations, a factor emphasized by Burns and Stalker (1961) and Simon (1960).

In a rapidly changing society as emphases shift and new needs arise, curricular changes in the school system may be necessary to meet new needs (Miles, 1964b). This was an important factor underlying curriculum change in Manitoba. The Manitoba Department of Education (1981) notes, "Insofar as a modern society depends for its existence upon certain kinds of knowledge, skills, and values, it is the task of the school system to help in instilling them" (p. 1). It is expected that the principal as the key person in the school would recognize the changing needs and assume the leadership role in implementing the changes necessary for the preparation for youngsters.

The Principal and the Rationale for Change in the Process of Curriculum Implementation

The literature on innovation and change emphasizes the point that people will not implement a change unless they

perceive a need for it (Bennis, Benne and Chin, 1985; Berman and McLaughlin, 1976; Fullan, 1982; Goodlad, 1975; Gross, Giaguinta and Bernstein, 1971; Leiberman and Shipman, 1973; Miles, 1964a; Orlosky and Smith, 1978; Twain, 1983). Changes imposed externally often neglect this factor and hence, implementation encounters serious problems. The identification of the need and rationale for change is a necessary step in the implementation of any innovation. Twain (1983) explained that

there must be a felt need if a planned change is to take place. The change constituency must be able to convincingly demonstrate why change is necessary. The level of motivation must be sufficient to overcome fear and other bases of resistance ... there must be a desire to change (pp. 144-145).

In a similar vein Frand (1977) explained that the failure to implement the mathematics reforms of the 1960's was due to the inability of the reformers to create felt need on the part of the teachers and administrators. Frand (1977) further noted,

If a change is to occur in a social institution such as a school, the members of that institution-pupils, teachers, administrators, and to a degree, parents-must see a need for change With respect to the educational change, the school is the primary unit for change, and the principal is the key person in guiding that change (p. 120).

Common (1981) corroborated the observation of Frand. She observed that for curriculum implementation to be successful, the users "must value and see a need for it in

their schools and classrooms" (p. 45). Common further observed that the best unit for change is the individual school and that the administrator (principal) is the single most important individual affecting implementation.

Leithwood and Montgomery (1982), in an extensive review of the principal's role in program improvement, came up with findings similar to those mentioned above. They noted that

Teachers' classroom behaviors are shaped first by the perceived needs and interests of their students and only after that by factors psychologically and physically more distant from the classroom (p. 333).

The above observation applies to the principal as well since many principals are also classroom teachers. Pratt (1980) noted that "people will not implement a change unless there are such rewards for doing so". In the absence of such rewards, "the most that can be expected is that they will adopt the appearance without the reality of the change". The basic reward system of the school observed Pratt, involved "relationship with learners in the classroom; changes that do not "enrich those relationships" will be resisted (p. 428).

Even when those changes are mandated, implementation becomes problematic (Purkey and Smith, 1985; White, 1979). With regard to mandated policies, Purkey and Smith (1985) noted that "forcing people to change without providing

them any choice diminishes their sense of responsibility and is not conducive to feelings of ownership and commitment" (p. 365). When commitment is lacking, educational and organizational effectiveness, may be reduced. Both the implementation literature and organization theory are clear upon this point. In a recent study of the implementation of a new social studies curriculum in an Australian school, Marsh (1987), felt that the teachers' lack of ownership may have hindered the implementation of that program.

However, feelings about loss of ownership notwithstanding, principals and teachers are motivated by other factors that are internal to the schooling system. Perhaps one of the most powerful of such reward systems is the intrinsic rewards provided school personnel by the pupils themselves (Doll, 1978; Jackson, 1968; Leithwood and MacDonald, 1981; Lortie, 1975; Pratt, 1980; Ross, 1981, 1982). These intrinsic rewards are achieved through meeting the needs of the learners. Ross (1982) observed that

it is the relationship with individual children that provides teachers with the greatest stimulation: the sudden dawning of awareness; the capturing of insight by the academic longshot; the dramatic improvement in a pupil that others have given up ... knowing that students have learned is the root of teacher satisfaction (p. 57).

Doll (1978), observed that intrinsic rewards were satisfying and meaningful for teachers. When it is recognized that proposed changes will provide better education for children,

principals and teachers who are keenly interested in education and the welfare of children seem likely to accommodate the changes and implement the new curriculum in the classroom.

When curriculum changes are mandated, principals can lessen the tensions by fostering teachers' pursuit of intrinsic rewards (Ross, 1981, 1982) through a variety of strategies. Ross (1982) noted that one such strategy that the principal can pursue is to provide teachers with information or evidence that the recommended change will increase student achievement of objectives that teachers perceive to be important. Leithwood and Montgomery (1982), in their review of the role of the principal in program improvement, cited numerous evidence that this strategy differentiated "effective principals" from "typical principals". Another strategy suggested by Ross is the use of public praise of both teachers' and pupils' efforts. "Public recognition of the social academic growth of students is likely to be efficacious, because student improvement is measurably rewarding to teachers" (Ross, 1982, p. 59).

As described in the literature reviewed above, the identification of the need/rationale for curriculum change is a critical factor in the implementation of curricula. Moreover, when the need is identified by the main

implementors themselves, viz. principals and teachers, the probability that curriculum will be implemented is greatly enhanced.

In Manitoba, the need for curriculum change was recognized by principals and teachers. A study by Lee and Wong (1985a) noted that 90% of all principals and 74% of a random sample of social studies teachers surveyed supported the change in the new Social Studies curriculum.

But while the recognition of need for curricular change by principals and teachers is important to the implementation process, factors in the curriculum and administrative organization are also important. Common (1981) observed that the "nature of the curriculum does affect directly and significantly the outcomes of implementation" (p. 43). Many others, for example Berman and McLaughlin (1976), Fullan (1982), and Gross et al., (1971) who have studied curriculum implementation, agreed that curriculum characteristics do affect curriculum implementation. But when curriculum is mandated, it is the task of the principal, curriculum characteristics notwithstanding, to facilitate the implementation process.

The Principal and Characteristics of the Curriculum

The implementation literature indicates that curricular characteristics or attributes have a direct effect upon the

level of implementation. Moreover, the extent to which principals recognize the adequacy or inadequacy of these curricular characteristics greatly influences the degree of implementation. Several studies (for example, Berman and McLaughlin, 1976; Common, 1978, 1981; Fullan, 1983; Fullan and Pomfret, 1977; Gross et al., 1971, among others) have found that the characteristics of the curriculum are important to the success of the implementation.

Theorizing about the effects of curricular characteristics in the implementation process is based largely upon the conceptualization of Rogers (1962) and Rogers and Shoemaker (1971). Rogers and Shoemaker theorized that it is the receiver's (user's) perception of the attributes that affected implementation. Fullan (1982) stated that these attributes "causally influence implementation" (p. 56).

Rogers and Shoemaker identified five conceptually distinct characteristics that other researchers have found to be particularly important in the process of implementation. The five are

- 1) Relative advantage: the degree to which an innovation is perceived as being better than what it supersedes.
- 2) Compatibility: the degree to which an innovation is seen as being compatible with the adopter's needs, values, and previous experience.
- 3) Trialability: the degree to which an innovation can be

tried on a limited basis.

4) Observability: the degree to which the results of an innovation are visible to others.

5) Complexity: the degree to which an innovation is perceived as relatively difficult to understand and use.

While these five characteristics are conceptually distinct, Rogers and Shoemaker noted that they are, however, not mutually exclusive. Fullan (1982) made a similar assertion that the characteristics are not in "isolation from each other" but "form a system of variables which interact" (p. 57). Several studies have examined the influence of all five curricular characteristics in the process of curriculum implementation. Some others focused upon one or two characteristics that the researchers considered to be important. The studies of Rogers and Shoemaker already mentioned, Carlson (1965) in Oregon, Clinton (1972) at the University of Toronto, and Crowther (1972) in Edmonton found that all five characteristics were important factors contributing towards the success of the implementation of the curriculum introduced in the schools where those studies were conducted. It may be noted that not all characteristics make equally the same contribution to the amount of variation in the implementation. The research literature indicated that complexity and compatibility appear to be the most important factors. These two

factors will be examined in more detail.

Compatibility

Burrell and Morgan (1979) stated that assumptions people hold about the nature of the social world and about people to a large extent determine their actions. In the Rand studies conducted by Berman and McLaughlin (1976, 1977) conflicting value systems emerged as a negative factor. Berman and McLaughlin (1976) noted "If the values and goals implicit in a project's design were not congruent with those of the project participants, the innovation was likely to be either symbolically implemented or not implemented at all" (p. 359). In looking at the program failures of the 1960's and 1970's, Benham (1977) attributed the failure to "a fundamental philosophical difference between the reforms being proposed and the institution of public schooling ..." (p. 205). Werner (1981) agreed: "the difficulty was in part that these materials and activities were based on operating assumptions and values not always shared by teachers" (p. 139).

An example in Canada where a conflicting belief system negatively affected implementation can be found in the case of the Alberta Social Studies Program. In 1975, Downey and Associates conducted a large scale evaluation of the program and found that many teachers were not implementing it (cited in Werner, 1981):

Throughout this inquiry, one very troublesome issue has returned to us over and over again It now appears abundantly clear to us that no depth of scholarship, no technical excellence, no classroom expertise will serve the needs of the new ... programs unless the personality and disposition of the teachers are supportive of its intents (p. 142).

Commenting upon Downey's findings, Werner (1981)

observed:

Many reasons for this lack of success could be given, but central was the observation that this program was based upon beliefs, including procedural and substantive assumptions about teaching social studies which were not understood nor accepted by practitioners (e.g. teachers and administrators) and the public (e.g. parents) to any great extent (p. 142).

In summary it would appear that where there is congruency between beliefs inherent in a program and beliefs of practitioners, implementation becomes much easier. Where beliefs are at variance, implementation is stymied. Consequently, it is the principal's task to help in the interpretation of the program's beliefs and assumptions, reconciling these with the beliefs of his staff in order to implement the program mandated to them.

Complexity

Many researchers have identified program complexity as a major variable affecting implementation (Berman and McLaughlin, 1976; Clark, Lotto and Astuto, 1984; Fullan, 1982; Fullan and Pomfret, 1977; Nicodemus, 1976; Regan and

Leithwood, 1975). While clarity in the conceptualization of Rogers and Shoemaker is included in the concept of complexity, Fullan, (1982), Fullan and Pomfret (1977), and Gross et al. (1971) have conceptualized clarity as a separate factor affecting implementation. Fullan (1982) noted that "central to complexity is whether a complex change is introduced all at once or through more divisible or incremental components" (p. 59). Citing evidence, Fullan noted that where program divisibility existed with an incremental implementation strategy, a higher frequency of success was observed. The Manitoba study by Lee (1985) found that "too many new curricula" introduced in "too short a time" was a negative factor in implementation; consequently, teachers did not implement "all the curriculum" and concentrated instead on those that "were given higher priority" (p. 12).

From among the works examined, the conceptualization of complexity by Berman and McLaughlin appeared to be the most definitive. Their conceptualization incorporated three aspects; all of which are important to principals and their staffs. The first, structural complexity, inhibits successful implementation. Examples cited by Berman and McLaughlin (1976) included "innovation that spanned many grade levels or tried to include all classrooms in particular grade levels in a district" (p. 358). Another "aspect of

complexity involves the treatment" (p. 358); in fact instructional strategies where the innovation demands significant changes in teacher behaviors implementation would be hampered.

The third aspect of complexity noted by Berman and McLaughlin involves the integration of the innovation "into the ongoing procedures of the school district" (p. 358). If, for example, the innovation requires "school wide scheduling changes and dislocation of faculties" (p. 359) or staff development that cannot fit easily into the daily routine of the teacher, resistance would occur to lessen implementation.

Fullan (1982) included materials in his analysis of complexity. He observed that materials which are "complete, well-organized, comprehensive and detailed ... are more effective at the implementation stage" (p. 60). Gross et al. (1971) observed that the ability to carry out an innovation depends upon the availability of materials and other resources required by the new curriculum. They thought that it was the responsibility of the administration to make available the materials. They noted in their study that failure of the innovation was partially attributable

to the failure of the administration to face up to the reality that such materials did not exist at the time, and that teachers had neither the skill nor the time required to develop them on the job (p. 200).

Clark, Lotto and Astuto (1984), Leithwood and Montgomery (1982) and Lipham and Hoeh (1974) concurred on the importance of materials and the role of administration in providing them. Lipham and Hoeh (1974) observed that

most major curricular changes require modifications in material as well as in personnel. Decisions concerning the provision of instructional equipment and supplies often present serious problems for the principal ... (p. 222).

Leithwood and Montgomery (1982) noted that "failure of school districts to provide adequate resources in support of program improvement is a third type of problem the principal must confront" (p. 333). Other studies in Canada (Aoki et al., 1977; Clinton, 1972; Crowther, 1972; Downey, 1975; Simms, 1978) have reported similar findings.

The Manitoba studies, (Lee, 1985; Lee and Wong, 1985b) mentioned that materials posed problems for teachers and principals. Lee (1985) noted in her study on the implementation of the elementary social studies that

administrators raised the issue of the high cost of new materials. Also cited consistently as a negative factor was the lack of texts and resources or support materials (p. 12).

In the study by Lee and Wong (1985b) the problem of materials and resources was further highlighted. These researchers noted that "social studies supplies were viewed as inadequate or unavailable" and that "elementary principals also cited the issue of text books and materials

most frequently (68%)" (p. 16). Secondary principals who were implementing the Grade 10 Science Program also saw the problem of materials "as their most frequent concern" (p.16). Lee and Wong summarized:

although curriculum guides and texts were generally not a problem, the lack of other supplementary classroom and teacher resource materials were a real concern of teachers. This factor is one which has an impact on teachers' implementation of curricula (p. 16).

Other aspects of curricula characteristics that influence implementation include inherent skills and knowledge required to carry out the innovation. Deficiency in this area is a serious barrier to the implementation efforts and an obstacle for the principal (Berman and McLaughlin, 1976; Brickell, 1964; Fullan, 1982; Giaquinta, 1978; Goodlad and Klein, 1970; Gross et al., 1971; Leithwood and Montgomery, 1982). Gross et al. (1971) attributed failure to implement to the administration's inability "to recognize that teachers needed to be resocialized" and "to provide them with the type of retraining required ..." (p. 200). Fullan (1982) concurred with this assessment: "Failure to realize that there is a need for inservice work during implementation is a common problem" (p. 66). Leithwood and Montgomery (1982) observed that "effective principals work directly as well as indirectly with teachers" (p. 327) in order to provide them with the skills and knowledge required to affect implementation, but that "typical

principals" acted primarily as school administrators providing "minimum inservice and are involved only in making the mechanical arrangements for such inservice" (p. 327).

In summary, it would appear that even when changes are made in the curriculum, the nature and characteristics of the change affect implementation. Such characteristics as relative advantage, complexity, compatibility and to lesser extent observability and trialability do impact upon the level of implementation. What also appears to be important is the extent to which principals mediate or intervene in the implementation process. The implementation literature even suggests that these interventions may be more powerful variables than the curriculum characteristics themselves.

The Principal - Personal Organizational/Institutional Variables in the Implementation Process

While curricular characteristics have been found to affect curriculum implementation, other factors such as the nature of organizational structures, principals' managerial behavior, instructional leadership and staff development have been found to influence implementation.

Structure

House, Kerins and Steele (1970) and Schumacher (1972)

concluded in their studies that while innovative characteristics may be important, situational variables and constraints in the adopting school may be more important as determining factors in the implementation process. For example, Littleton (1970) found, in a study of elementary school principals' willingness to try innovations in their schools, that perceived characteristics of the influence of structure of the school was of greater significance than the perception of innovation characteristics.

Structure plays an important role in any organization. Structure determines the overall functioning of an organization. Owen (1981) noted that

it is the structure that gives an organization order, system and many of its distinctive characteristics Structure dictates, in large measure the patterns of the communication networks that are basic to information and therefore to decision making. Structure also determines the system of work flow that is presumably, focused on achieving the organization's task (p. 89).

Structure then appears to be an important organizational factor or variable that influences change. Gross, Giaquinta and Bernstein (1971) suggested that a structure was necessary in order to provide some mechanism to deal with "anticipated and unanticipated problems that may arise" (p. 201) in the process of implementation. Clegg and Dunkerley (1980) observed that "indeed, organization structure itself becomes a domain of more or less certainty

..." but "this structure exists in order to absorb uncertainty: in this way a bounded rationality may be achieved" (pp. 264-266).

The Manitoba Education studies (Lee and Wong, 1985a, b) observed that schools were beginning to form some types of organizational structures to facilitate the implementation of the new/revised curricula. The report by Lee and Wong (1985a) noted that "some schools and divisions were moving in this direction" (p. 7) i.e. the development of some form of structure. In their other report, Lee and Wong (1985b) observed that sometimes "a structured process would exist for one curriculum but not for another, and that where there was a division initiated structure, more effective implementation and reduced teacher frustration occurred" (p. 7). They further suggested the development of a structured process at the divisional level in order to facilitate the curriculum implementation process. The concept of structure was explored by Hardy (1983) within the Manitoba context. Hardy developed a model which she suggested could be useful for school division implementation of K-12 provincial programs. In her study, Hardy pointed out the importance of the principal's role at both the school building and the divisional levels.

Principals' Managerial Behavior

Many studies of the principalship focus upon principal

managerial behavior (Clark et al., 1984), particularly how principals actually spend their time. It has been suggested (Boyd and Crosson, 1981; Bridges, 1982; Manasse, 1985) that these studies have been influenced by the work of Wolcott (1973) and especially that of Mintzberg (1973). Wolcott's work was an ethnographic study of a principal. Mintzberg's method includes structured observations.

Mintzberg's method utilizes structured observation to quantify work activities. The method tends to neglect some of the subtle aspects, contexts, symbols, culture, ethos, meanings and even spur of the moment one-time serendipitous activity that may have deep meaning and offer a better insight into the change process. As such, Mintzberg's technique has limited applicability for a study such as the one undertaken here.

The description of the nature of management work of the executives studied by Mintzberg was thought to resemble that of school principals - a hectic pace, variety, fragmentation, brevity, and control - hence the application of Mintzberg's concept to educational studies. As a consequence, the current belief that the principal is an instructional leader in the school does not appear to be widely supported in the literature on principal managerial behavior. Morris et al. (1982) stated "we found that instructional leadership (in terms of the time spent in

classroom observation and teacher supervision) is 'not' the central focus of the principalship" (p. 689). Sackney (1980) and Edwards (1979) characterized the principal's work by brevity, variety and fragmentation. March (1981) describes the principal as being more administrator than facilitator. Edwards (1979) described a substantial amount of the principal's work as "putting out fires" with activities averaging five minutes each. Rallis and Highsmith (1986) frankly suggested that school management and instructional leadership are two different tasks that cannot be performed effectively by a single individual.

Boyd and Crowson (1981) concluded that instructional leadership did not appear to be as important as organizational maintenance and pupil control. Numerous other studies have reported similar findings. For example, Brubaker (1976) in his study of elementary school principals observed that

most decisions don't fall in the area of curriculum and instruction as this area is commonly defined. That is most of the principal's decision didn't directly affect what children learn in elementary classrooms. In fact many of the tasks performed by the principal appear to be at a very low level and might be labelled mundane (p. 52).

In a study of the principal's tasks in the elementary school, Peterson (1977) observed a similarity to Brubaker's study. Further, Peterson observed that most of the

principal's tasks were small, fragmented and of short duration averaging about thirteen activities per hour with the range of four to fifty. Over 85% of the principal's time was spent on activities of less than nine minutes duration and for about 80% of the school time the principal could be found in the general office area.

In another study of elementary principals, Morris et al. (1981) found that the principal's day could consist of over one hundred separate events with up to four hundred interactions. A study by Kmetz and Willower (1982) found that classroom observation of the elementary principal took up to 2.5% of his time and teaching only 1.9%; other activities occupied most of the elementary principal's time. A very recent questionnaire study by Andrews and Hearn (1988) done in the State of Washington, found that elementary principals spent 8.08% of their time on educational program improvement, 15.33% on personnel selection and evaluation, 26.70% on school management, 12.20% on district, state and federal coordination and the rest of the time on other school matters. Professional preparation took up 4.94% of the principal's time. This study found that principals believed that improvement of the educational program and evaluation of staff are the most important aspects of their job but they in fact spent the greatest block of their time in school management.

These findings appear to be consistent with those above, for example Morris et al. (1981). In his extensive review of the literature on managerial behavior of principals, Martin (1980), using Mintzberg's method in his study, made similar findings to those reported above. Martin (1980) observed:

If the job description studies reveal any single impression, it is the fact that the principalship is a role that is comprised of numerous components, some of which are more vital than others The relative importance of each depends greatly upon perspective, organizational demands, and personal style. In addition, performance of tasks in one area may well have a carry over effect in others (p. 55).

And Morris et al. (1982) noted:

Our observations indicate that the principal's workday is very busy and highly unpredictable. The principal's time is typically spent in many activities of very short duration, with considerable variety and sudden shifting of gears throughout the school day. The principalship we found is a peripatetic occupation, with much of the working day spent in locations other than the principal's office (p. 689).

Leithwood and Montgomery (1982) noted that less than 50% of elementary school principals actively work toward instructional or program improvement in their schools. Moreover, Leithwood and Montgomery attributed the chaotic pictures about the principalship to the inherently ambiguous and complex role of the principal. Ambiguity is manifested when there is a lack of clear expectations for the role, conflict about responsibilities, no viable rationale for assigned duties and inappropriate criteria for assessing

performance. Role complexity results from the number of different people the principal has to deal with. The predominant nature of "administrative leadership", noted Leithwood and Montgomery (1982) "is recognized as unsatisfactory" by both principals and "external agents" (p. 331). Martin (1980) reported similar dissatisfaction by principals themselves. Leithwood and Montgomery (1982) suggested that this problem required further study. They also noted that "reasonably effective principals have, no doubt, found ways of resolving issues still perplexing their less effective peers" (p. 331).

Instructional Leadership

While most studies suggest that principals are constrained by mundane administrative tasks, studies of educational change also portray the principal as a key or pivotal person in the change process. School effects research also suggests the importance of strong instructional leadership from the principal. These newer studies have led to a reconceptualization of the principalship. A recent study by Hallinger and Murphy (1987) revealed that "principals are more actively involved in managing curriculum and instruction than the literature leads the reader to expect" (pp. 232-233). Hallinger and Murphy commented that their "finding is at odds with results of observational studies, which suggest that elementary school

principals tend to be relatively uninvolved in managing curriculum and instruction" (p. 236). On a closer examination, what may appear to be contradictory may in fact not be so. The answer to the contradiction may lie in part on a combination of factors discussed by Hallinger and Murphy (1987) and on how principals use their authority. Hallinger and Murphy offered three explanations for the contradictions and suggested the need for further investigations of principal and instructional management behavior.

First, they suggested that "the structured observation studies underestimate the instructional management behavior that principals perform" (p. 236). In support of this position, Hallinger and Murphy noted that studies which indicated principals are relatively uninvolved in curriculum and instructional management utilized the structured observation techniques. Hallinger and Murphy, drawing on the work of Greenfield (1982), Gronn (1982) and Pitner (1982), criticized structured observation and noted that the technique "does not adequately describe the substance of managerial work" (p.236). Greenfield (1982), further observed that structured observation lack the qualitative data that adequately describes activities. Second, Hallinger and Murphy cautioned that their instrument "may have overestimated the instructional

management activity of the principals" (p. 236). They noted, however, that their "statistical analyses suggest that the instrument does provide reliable and valid data on principal behavior" (p. 237). Third, they noted that "the discrepancy could result from factors unique to this particular school district" (p. 236) such as the provision of extra resources including human resources.

Principals have considerable authority but differ in the way they use it (Morris et al., 1982; Sarason, 1971). Principals do vary in their behaviors or interventions they make in such a way that they influence change (Hurling, Hall, Hord, 1982). Principals who influence change are described as "effective" (Leithwood and Montgomery, 1982) or as "initiators" (Hord and Hall, 1987).

Effective principals, like effective managers (Peters and Waterman, 1982), exhibit a bias for action, and they use their authority to confront and successfully handle problems (Blumberg and Greenfield, 1980). "They use their discretion to upgrade instructional programs and staff quality without causing staff conflict" (Manasse, 1985, p. 447). They demonstrate "assertive leadership" without its rationalistic overtones (Shoemaker and Fraser, 1981). Effective principals prioritize and set clear achievable goals and evaluate results, have high expectations, model the norms, create orderly climate, seek out resources, attend

meetings, seminars and are collegially interactive (Manasse, 1985; Shoemaker and Fraser, 1981).

Bossert, Dwyer, Rowan and Lee (1982) commented on the instructional management role of the principal:

the studies indicate that the principals in these successful schools are perceived to be strong programmatic leaders who know the learning problems in their classrooms and allocate resources effectively. Effective principals create the conditions listed above by providing coherence to their schools' instructional programs, conceptualizing instructional goals, setting high academic standards, staying informed on policies and teachers' problems, making frequent visits, creating incentives for learning, and maintaining student discipline (p. 35).

Morris et al. (1982) suggested that effective instructional leaders make good use of "creative insubordination", "civilized disobedience", "loophole management" and "old crony networks" in order to protect the integrity and operation of the school (see also Manasse, 1985). Principals often enter into these pacts or informal covenants so that they can enhance school effectiveness. "Only with such extra-bureaucratic maneuvers can a principal keep the educational program of the school on schedule" (Morris et al. 1982, p. 692). While data on leadership style is as yet inconclusive, studies have revealed that principals who are assertive, directive, strongly facilitative, authoritative and democratic initiators (Manasse, 1985) are more effective in implementing change.

Research at the Texas Research and Development Centre at Austin has attempted to link principal leadership style with implementation effectiveness. Hall, Rutherford and Griffin (1982), Hord and Hall (1987), considered their three hypothesized styles of "responder", "initiator" and "manager" as a "useful heuristic". They warned that while the three styles could be viewed as positions on a continuum of style, very few individuals "fit exactly into one particular style". Moreover, "the three styles do not represent the entire spectrum of possible styles". (Hord and Hall, 1987, p. 67).

They considered "initiators" and "managers" to be more effective than "responders". Responders see themselves primarily as school administrators and allow teachers to carry out their instruction without guidance, on the rationale that teachers are professionals. Managers are somewhere between responders and initiators. Managers become involved when it is clear that an innovation is given priority by the school board. Managers keep to the basics of what is required. Initiators, on the other hand, take the lead and assert themselves. Hord and Hall (1987) noted that "the more principals functioned as initiators, the more successful was the implementation that occurred" (p. 70). Principals who are initiators are leaders in the change process, for making decisions, creating opportunities

for staff development or training, particularly when new skills are required for the implementation of new curriculum. One of the findings in the Hord and Hall's study was that the principal did not work alone, but used other key individuals to assist in facilitating the implementation. Hallinger and Murphy (1985) made a similar observation and attributed the factor of the second change facilitator usually a vice principal for the implementation success he reported.

Staff Development

Lack of skill and knowledge have been identified in the implementation literature as serious barriers to successful implementation. In the study by Gross et al. (1971), these factors were found to hinder implementation efforts. Bentzen (1974) observed that schools which experienced successful change had organizational climates that promoted professional growth and interactions.

Rubin (1987) has commented that "it is virtually impossible to separate teacher and administrator capability from efforts to reform schooling" and that there is a lack of "good models of long term programs which produce systematic and continuous improvement in professional knowledge and skill" (p. 174). He further observed the current state of affairs to be problematic and commented,

As things stand now, teachers acquire much

of their technical insight informally, from other teachers. Most would readily welcome better training. What they seek, in the main, however, are hands on techniques which are easily implemented. As a consequence, much of the staff development remains largely ad hoc. Programs tend to be initiated on a random basis; the training is likely to focus on one current fad or another; and too often activities substitute for genuine endeavours (pp. 174-175).

Schlechty (1985) cited in Rubin (1987) observed a strange parallel between staff development and efforts by civic authorities to eliminate organized prostitution.

From time to time citizens complain and authorities launch an improvement campaign. The practitioners then shift from one area to another. Soon, however, the pressure eases and old habits return (p. 175).

Fullan (1987) suggested that "staff development is synonymous with change" and that the "principal is critical because better staff development means better organization" (pp. 214-215). Fullan (1982) also observed:

Since the essence of educational change consists in learning new ways of thinking and doing, new skills, knowledge, attitudes etc., it follows that staff development is one of the most important factors related to change in practice (p. 66).

Lee and Wong (1985b) noted in their Manitoba study that "where principals had participated in inservices effective implementation seemed to be aided" (p. 12). Other researchers (Berman and McLaughlin, 1976, 1977; Fullan, 1985; Frey, 1979; Georgiades, 1980a; Griffin, 1983; Leithwood and Montgomery, 1982; Patterson and

Czajkowski, 1976; Purkey and Smith, 1985; Rutherford, 1981) have all stressed the need and importance for staff training and development prior to and during the actual implementation phase. Fullan (1982, 1985) suggested that the most effective training is done during actual implementation and that one shot workshops and "ad hoc-ism" are ineffective.

Leithwood and Montgomery (1982) as well as Meyer (1983) observed that "effective principals" worked closely with teachers directly and indirectly in the classroom - a form of individual inservice education identified during classroom observation. These principals also arrange for training inservice education programs when they themselves lacked the expertise and participate in these along with teachers. Principals also provided opportunities for teachers to visit other schools and interact with other teachers (the concept of observability discussed above). Less effective principals, acting in their primary roles as passive school administrators, provide minimum inservice/opportunities for their teachers. Fenstermacher and Berliner (1985) have made an extensive examination of the literature on staff development and observed that "staff development has become a buzzword for the 1980's". They also observed:

Teachers do need help, but this need is not necessarily because of the lack of skill or commitment. Rather, it is because of the need

to understand and keep pace with the manifold and the rapid changes that impinge on schooling. In this decade, staff development has come to be recognized as one of the important and powerful ways to assist not only teachers but all members of the educational profession (p. 282).

Fenstermacher and Berliner (1985) also examined the nature and structure of the staff development in the eighties.

The staff development of the eighties is not the same as the inservice education of earlier decades. In earlier times teachers were typically thought to have the primary responsibility of their own renewal, reading what they believed most helpful, taking such courses as they thought valuable for their work and attending clinics and workshops that promised to increase their capacity to instruct. It is no longer possible for teachers to close their classroom doors and, in doing so, disconnect themselves from the world beyond. Modern teachers function in a complex environment of policy, law regulation, special programs, organizational structures, communication systems, and professional associations. For these and other reasons, staff development has become an activity that encompasses much more than a single teacher acting as an individual (though when it does, on occasion, involve a single individual, it is understood that this person's activities are a part of the larger environment of the school). Modern staff development is an enterprise of groups of teachers, often working in concert with specialists, supervisors, school administrators, counselors, parents and many other people who populate or are connected with the modern school. As such, staff development has become a major activity involving the time and resources of many people and making extensive demands on school system budgets (p. 282).

Fenstermacher and Berliner have defined staff development "as the provision of activities designed to advance the

knowledge, skills and understanding ... in ways that lead to changes in their thinking and classroom behavior" (p. 283). They have developed a conceptual framework with four components as an analytical tool for looking at staff development. The four components are (1) a definition, (2) a mapping sentence, (3) a description of participant roles and (4) evaluation.

The definition is straight forward. The mapping sentence has four factors - how the training is initiated - internally or externally? Who participates? What is the purpose, enrichment, remediation or compliance? How is participation decided, on a voluntary basis or by mandate? Participant roles include planners, providers or deliverers, recipients and evaluators. The fourth component, evaluation, is concerned with the worth of the activity in relation to the proposed change(s) rather than how well the activity is done. This does not necessarily mean that the activity should not be done well or be successful. It may be successful but may not be relevant. Rather, the activity should be done well and also be effective i.e., it should help facilitate the implementation process without engendering dissatisfaction among participants. The satirical work "The Saber Tooth Curriculum" by Peddiwell (1939) offers an excellent insight where the curriculum - "fish grabbing" and "tiger scaring" was successful but

totally irrelevant.

The conceptual framework appears to be a useful device for looking at staff development. Implicit in the framework are such factors as the organizational dynamics, school climate, social relationships or leadership. The framework will be utilized in the analysis of staff development in Chapter Six.

The Principal's Planning, Decision Making and Implementation Strategies

In their implementation study Gross, Giaquinta and Bernstein (1971) state clearly that "it is management responsibility to develop an overall strategy for change". Their rationale for this assertion is that

management is in the position to command an overall view of the organization and of the complex set of forces that influence it, only it can give general direction to the 'entire course' of implementation efforts (p. 212).

Gross et al. also suggest in their strategy that some mechanism must be in place for continuous consultation, feedback and evaluation of the implementation process. The strategy suggested by Gross et al. posits the principal in a leadership role where s/he is required to structure the implementation process. Beauchamp (1975) takes the same stance. However, Gross et al. further suggest that the nature of the innovation may require decentralization of

the decision making. While participatory or collaborative decision making remain problematic (Owen, 1981; Sackney, 1980; Wickstrom, 1979), positive findings reported in the implementation literature strongly suggest this strategy be followed by principals. A great deal of the literature on organization theory favors decentralization and participative decision making as well (Argyris, 1971; Blake and Mouton, 1964; Blau, 1956; Blau and Scott, 1962). Blau (1956) observes "unless employees consider themselves partners in a common enterprise rather than tools in the hand of management, they are not prone willingly to assume responsibilities of their own" (p. 80). It may well be to take note at this point that contingency theory (Fiedler and Chemers, 1974) has attempted to show that participative management has had mixed results, success in some instances but not in other situations.

Research suggests that teacher involvement in meaningful decision making, particularly decisions that affect them, is essential to successful implementation of educational change. In other words, primary decision making and responsibility, having their loci closest to where the programs are carried out, are more effective and create a more harmonious climate where conditions of work are both stimulating and satisfying. The research literature is replete with findings that show collegial planning and

decision making to be related with more effective program implementation. Goodlad's (1975, 1976) League of Cooperating Schools operated upon this principle. Other studies (for example, Berman and McLaughlin, 1976; Clark et al., 1984; Cohen, Deal, Meyer and Scott, 1979; Cox and Wood, 1980; Deal and Celotti, 1980; Fullan, 1982, 1985; Goodlad, 1976; Georgiades, 1980b; Greenfield et al., 1974; Herrick, 1982; Lake, 1984; Leithwood and Montgomery, 1982; Lipham, 1983; Parish and Arends, 1983; Purkey and Smith, 1985; Ross, 1981; Smyth, 1981; Tye, 1973) provide supporting evidence that collaborative planning and decision making positively affect implementation.

In one of the few experiments conducted, in North Carolina, an entire elementary school that had just received a new principal (who was a doctoral student at the University of North Carolina) decided to change from bureaucratic decision making in curriculum and instruction to professional decision making in this area. A team approach strategy was emphasized in this change process. Various covenants and agreements were entered into by the principal and staff. Brubaker (1976) was a consultant to this group. He reported great changes in staff behavior; people were somewhat ambivalent at first but became much more satisfied as things progressed. Serious problems cropped up in this experiment, for example, problems about

responsibility and communications. As the experiment showed signs of floundering, the principal reverted to the bureaucratic mode of operation. However, this action served to bring the project and everyone back to the realization of their responsibilities and commitment. It would appear from the numerous presentations made by this school at professional conferences and meetings (Brubaker, 1976) that this experiment was successful, but not without encountering many difficulties.

The principal in Brubaker's study was successful in the implementation of the innovation for a number of reasons. He was placed in major leadership roles both administratively and instructionally. The principal had professional training in curriculum and instruction and administration as well. He had good communication opportunities with district office, was recognized as a key person, and he utilized this opportunity to secure and deliver important resources. His role was flexible timewise and this allowed him to make regular contacts with all participants in the school, sounding out his ideas and giving feedback. Moreover, he was interested in change and exuded this feeling to his staff. Gronn (1983) makes a similar observation about the effect of this type of visibility of the principal.

Summary

From the literature reviewed, it was found that

curriculum implementation is a complex phenomenon with many interrelated aspects. It was also found that the principal is a pivotal person in the implementation process. While much of the available literature is written from a managerial perspective and is often speculative or prescriptive, the implementation literature that is available about the principalship in the implementation process does suggest that such factors as rationales, belief systems, curriculum characteristics, principal behavior, leadership styles, organizational structure among some others affect curriculum implementation. How this happens is as yet not quite clear as research on how the principal goes about the process of curriculum implementation is limited. The available research, however, has suggested that further research is needed to provide answers to the above question. This study acknowledges this need and attempts to provide answers.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

The Research Design

The lack of theoretical literature to provide a conceptual framework "which could be used to analyze and to understand the daily work of the school principal" (Patterson, 1977, p. 78) makes it apparent that a need exists for inquiry into how principals proceed with the process of curriculum implementation. Bussis et al. (1976) explained that the time seemed long overdue for research to take up more direct lines of enquiry into education as it is practised and experienced in schools. For this purpose, this study examined in depth a selected sample of principals in the process of implementing the revised Manitoba curricula in the elementary schools of a school division.

The study was carried out by the researcher who interviewed principals and teachers in their schools and classrooms. General observations on some aspects of implementation such as pupils' work, teachers' preparation and classroom work, or principals' involvement in the implementation process were made in the school setting. These observations were cross referenced with what principals and teachers said they did about implementation.

The study was carried out in several stages. The first stage involved the selection of a school division that was implementing revised curricula and securing the participation of the principals. The second stage involved the design of the research questions and interview guide. This stage also included the preliminary or pilot testing of the guide in the Manitoba context with two practicing school principals (who did not participate in the main study).

The third stage of the study involved the collection of the data through interviews with principals and teachers, and through general observations in the school situation. The fourth stage involved the analysis of the data. Analysis was done on two levels. The first level involved a general reading and summarization of the interview transcripts. The second level was more exploratory and interpretive of the data. Patterns of relationships among the data were sought and compared with the theoretical literature on curriculum implementation.

The research design utilized a semi-structured interview for collection of the data. The design utilized Werner's (1981) conceptual framework of understandings to explore respondents' belief systems about knowledge and knowing; their expectations about the nature of teaching

and learning; their values about what is important in the classroom; and, how these factors influenced their curriculum implementation practices. As indicated in Chapter One, Werner's approach to the problem of curriculum implementation is basically an interpretive one. Werner's framework is described in the following pages.

Werner's Conceptual Framework

The method employed in this study was consistent with Werner's conceptual framework outlined in Figure 3 below. The framework contains five clusters of questions.

Figure 3. Werner's Conceptual Framework

Cluster 1: Focus on RATIONALE (Why change?)

Why is the new curriculum superior to what we already have or to other available curricula?

What potential benefits does the new curriculum hold for my students that cannot be gained through the existing curriculum?

Why has the new curriculum been developed? In response to what needs?

Why should educators want to use this new curriculum?

Why should I adopt this change?

How can we justify this change?

Cluster 11: Focus on SCOPE (What are we asked to implement?)

What are the new materials and when will they be available to me? What are students to do?

What is the philosophy?

Who developed the curriculum? Has it been piloted in classrooms, and what has been the response to it? Is there any evaluation information on its effectiveness? What is the reading level of the resource materials? What are the support materials?

Cluster 111: Focus on the INNOVATION (What is really new?)

What are the major differences between the old and the new curriculum? How much overlap? Is this really a "new" curriculum? In what sense (e.g. goals, materials, activities, roles?)

Do there seem to be omissions in the new curriculum?

Cluster 1V: Focus on IMPLICATIONS (What aspects of current practice will be affected by using this curriculum?)

Can we continue to use those aspects of the "old" curriculum that are successful in our classroom? How?

What will teachers have to do/learn to be able to use the new curriculum?

What do I need to learn in order to implement the curriculum?

What resources are required (facilities, equipment, funds?)

Does the Philosophy of the new curriculum fit my frame reference? Do I need to change my attitudes and beliefs?

Is it consistent with my beliefs, values, and goals of education?

Who will help me with the changes, and when? Are there ongoing inservice and funds available? How will inservice take into account my individual concerns and needs? Is there going to be continuing support?

What role changes will be required of me?

What types of involvement will we be given in the implementation process itself?

What does the implementation mean for planning time?

How much extra time will planning take?
What are the implications for my students? Will they be capable of meeting the new expectations?
How much time is given for me to come to grips with the new curriculum? How will the change affect me?

Cluster V: Focus on ARTICULATION (How does the curriculum fit with other school programs in the same subject area or in different subject areas?).

How does the new curriculum dove-tail with other programs in the school?
How congruent is the new curriculum with the school's mandate and its purposes?

How does the new curriculum fit in with the current school context (e.g., building restrictions, staff competence, types of students?)

Source: Werner, 1981. pp. 157-158.

Werner developed his conceptual framework in order to gain insights into how curriculum implementors' beliefs, assumptions and values about teaching and learning influence their curriculum implementation efforts. Werner (1981) stated that "teachers interpret and use curricula on the basis of assumptions and interests which they hold concerning the classroom" (p. 141).

Werner worked with various school districts and with the Program Implementation Services Branch of the Ministry of Education, British Columbia. He was involved in researching implementation, conducting seminars and developing provincial implementation processes and documents. In the development of his conceptual framework

for implementation, Werner collected, over the years, from every school district in British Columbia, written responses about implementation processes from about 150 principals, vice-principals, superintendents, supervisors, directors of instruction and teachers.

On the basis of similarity of concerns about implementation made by respondents, Werner was able to group the concerns into five clusters (Figure 3) "each representing a typical feature that characterizes the experience of change that educators undergo when confronted with an innovation" (p. 150).

Werner then validated the five clusters of understandings with "various educators throughout the province" of British Columbia. Groups of Educators who were not initially involved in Werner's original study were asked to judge the relevance of the framework for their own implementation activities. Werner noted that the framework is currently used in some school districts "and have become a part of the Ministry of Education planning document" (p. 152). He also noted that the framework allows "for further refinement over the next couple of years" (p. 152).

Modification of Werner's Framework

It was felt that Werner's framework could be adapted

for a study in Manitoba to study the curriculum implementation process of elementary school principals. Werner suggested further refinement to his framework. For example, the question in Werner's framework, "What do I need to learn in order to implement the new curriculum?" was changed by the researcher, to "What did you have to do/learn in order to implement the new curriculum?" Such changes did not alter the structure of the conceptual framework.

It was observed that some of the questions in Werner's framework could produce the same responses, and therefore, would be redundant. For example, in the pilot study, it was revealed that the last five questions in cluster one of Werner's framework produced similar responses as in the first question. It was thought, in the interest of clarity and simplicity, that questions such as these be eliminated from the final study. The modification made to Werner's conceptual understandings is shown in Figure 4.

The use of a modified instrument in a different situation, though not too dissimilar context, raises the question of validity of the instrument. Validity is not something that is given per se. It is determined by the situation and the purpose for which it is used (Gay, 1981). Sellitz, Wrightsman and Cook (1976) wrote that

"there is no such thing as a completely valid instrument" (p. 169). Cohen and Manion (1980) stated that "every interpersonal situation may be said to be valid ... whether or not it conforms to expectation ..." (p.253). Validity in this study was dealt in the following manner.

Firstly, Werner's framework was validated in a similar educational context with principals, teachers and other educators. Moreover, Werner himself stated that the framework was in need of further refinement.

Secondly, only questions that were thought to be redundant and identified as such in the pilot study were eliminated. This did not alter the basic structure of the understandings and the responses elicited were consistent with what was sought.

Thirdly, respondents were comfortable with the instrument and felt that the questions asked measured what they intended to measure. They felt that the questions were reflective of concerns about the curriculum implementation process at the district and school level.

Fourthly, it was felt by the researcher that the framework used in the study generated sufficient data about implementors' beliefs, feelings, understandings about education, about the factors influencing implementation and about the implementation process

itself. This fourth factor in itself was thought to offer sufficient validity for the study.

Figure 4. Modification of Werner's Conceptual Framework

Five clusters of Concern	Modification
Each cluster contains only some examples of the responses given by educators	
Cluster 1: Focus on Rationale (Why change)	used
Why is the new curriculum superior to what we already have or to other available curricula?	changed
What potential benefits does the new curriculum hold for my students that cannot be gained through the existing curriculum?	used
Why has the new curriculum been developed? In response to what needs?	redundant
Why should educators want to use this new curriculum?	redundant
Why should I adopt this change?	redundant
How can we justify this change?	redundant
Cluster 11: Focus on Scope (What are we asked to implement?)	used
What are the new materials and when will they be available to me? What are students to do?	used
What is the philosophy?	used
Who developed the curriculum?	redundant
Has it been piloted in classrooms, and what has been the response to it? Is there any evaluation information on its effectiveness?	used
What is the reading level of the resource materials?	used
What are the support materials?	used

Cluster 111: Focus on the Innovation (what is really new?)	used
What are the major differences between the old and the new curriculum? How much overlap? Is this really a "new" curriculum? In what sense(e.g. goals, materials, activities, roles?)	used redundant
Do there seem to be omissions in the new curriculum?	used
Cluster 1V: Focus on Implications (What aspects of current practice will be affected by using this curriculum?)	used
Can we continue to use those aspects of the "old" curriculum that are successful in our classroom? How?	redundant
What will teachers have to do/learn to be able to use the new curriculum?	used
What do I need to learn in order to implement the curriculum?	redundant
What resources are required (facilities, equipment, funds?)	used
Does the philosophy of the new curriculum fit my frame of reference? Do I need to change my attitudes and beliefs? Is it consistent with my beliefs, values, and goals of education?	changed but simplified
Who will help me with the changes, and when?	changed
Are there ongoing inservice and funds available? How will inservice take into account my individual concerns and needs?	but
Is there going to be continuing support?	modified
What role changes will be required of me?	redundant
What types of involvement will we be given in the implementation process itself?	changed/ simplified
What does the implementation mean for planning time? How much extra time will planning take?	changed/ simplified
What are the implications for my students? Will they be capable of meeting the new expectations?	used but modified

How much time is given for me to come to grips with the new curriculum? redundant

How will this change affect me? redundant

Cluster V: Focus on Articulation (How does the curriculum fit with other school programs in the same subject area or in different subject areas?) used

How does the new curriculum dove-tail with other programs in the school? used but modified

How congruent is the new curriculum with the school's mandate and its purposes? used

How does the new curriculum fit in with the current school context (e.g., building restrictions, staff competence, types of students?) used

Key for Figure Four

Used- utilized in the research design.
 Changed- utilized in the research design but question simplified.
 redundant- This question and expected response are already included in another question.
 simplified- wording made more explicit.

Rationale

It was observed in Chapter One that educational practice was in need of further conceptualization and theoretical speculation that relate to the process of curriculum implementation. It is at the implementation stage that the curriculum innovative process breaks down. The principal has been recognized as a crucial factor in

the implementation process, but the paucity of knowledge about how principals go about the process of implementation led this researcher to make an empirical examination of the curriculum implementation process undertaken by principals.

The method employed in the study was that of a semi-structured focused interview. After consideration of the scope of the study, discussions with principals, and the time and cost factors, it was decided that this method was the most appropriate. The interview method immediately allowed respondents to elaborate more freely (Borg and Gall, 1979). This method also provided for probing on the part of the interviewer in order to gain a wider and thorough understanding of respondent's opinions, meanings, interpretations, beliefs and insights into how they construed situations as they went about the process of curriculum implementation. It was thought that this method allowed for the collection of large amounts of "thick" data. Borg and Gall, (1979) noted that

"the semi-structured interview is generally most appropriate for interview studies in education. It provides a desirable combination of objectivity and depth and often permits gathering of valuable data that could not be successfully obtained by any other approach" (p. 313).

Bussis et al. (1976) lauded the interview method.

"The strength of an interview lies in its ability

to elicit personal opinions, knowledge, understandings, attitudes, and the like, and accumulated evidence of this nature does provide adequate support for reconstructing a general picture of construct systems" (p. 15).

Hallinger and Murphy (1985) advocated the use of "qualitative methodologies to generate richer descriptive reports about how principals manage curriculum and instruction (p. 238).

Miles (1979) observed that the "need to develop grounded theory usually exists in tension with the need for clarity and focus" (p.591). It was observed in Chapter One that curriculum implementation was in need of further specificity and clarity of the process itself. Lazarsfeld and Barton (1971) observed that "research does not always begin with general theoretical categories and theoretically prescribed relations among them". They further observed that in the social sciences "a great deal of research must be of an exploratory nature, aiming at qualitative answers to such questions as the following: "What goes on in a certain situation...?" (p.142).

As this was an exploratory study dealing with implementors' feelings, values, beliefs and assumptions about knowledge, education, the world of the classroom and how these influence the curriculum implementation process, it was felt that the naturalistic or

interpretative paradigm would be most appropriate for this study. Moreover, it was the interpretive paradigm that was predicated in Werner's conceptualization. Werner sees curriculum implementation as a social process. The interpretive approach consequently takes into account such social processes in the total implementation process hence, the suitability of the paradigm for this study. It was felt that use of this paradigm would produce the "thick" empirical data that was sought, and which would lead to the improvement of educational practice through the production of "grounded theory". Lazarsfeld and Barton (1971) recommended an "intuitive approach to the understanding of society". They felt that "systematic study can be carried on in the social sciences as elsewhere by many devices which are less precise than strict quantitative measurements ..." (p. 140).

Miles (1979) put the case for the naturalistic paradigm very cogently in describing the attractiveness of qualitative data.

Qualitative data are attractive for many reasons: they are rich, full, earthy, holistic, "real"; their face validity seems unimpeachable; they preserve chronological flow where that is important, and suffer minimally from retrospective distortion; and they, in principle, offer a far more precise way to assess causality in organizational affairs than arcane efforts like cross-lagged correlations (after all, intensive fieldwork contains dozens of "waves" of data collection, not just two or three).

Furthermore, their collection requires minimal front-end instrumentation. Qualitative data also have attractive qualities for their producers and consumers; they lend themselves to the production of serendipitous findings and the adumbration of unforeseen theoretical leaps; they tend to reduce a researcher's trained incapacity, bias, narrowness, and arrogance; and their results, reported in forms ranging from case studies to vignettes, have a quality of "undeniability" (Smith, 1978) that lends punch to research reports. Finally, there are many reasons to believe that qualitative data can very usefully be played off against quantitative information from the same organizational setting (Sieber, 1973) to produce more powerful analyses than either sort of information could have produced alone (p. 590).

As indicated in this section by Miles, Borg and Gall among others, the naturalistic paradigm was determined to be appropriate for a study such as the one undertaken here. The assumption made by Werner was that curriculum implementation is a social process; hence, the naturalistic paradigm through the case study interview method was determined by the researcher to be the most appropriate. The case study was able to provide the kind of "thick" data needed to give some clarity and specificity to the curriculum implementation process pursued by principals.

Fullan (1982), has emphasized that curriculum implementation is a process, not an event. He also stated that the principal was a key factor. It was felt that the case method through interviews with principals would be the

most appropriate for conducting the study. The case study-interview method has been widely used for research studies such as this. The Rand study (cited earlier) by Berman and McLaughlin (1976), the study by Blumberg and Greenfield (1980) among others are but some well known examples of studies on principals' roles in program improvement that utilized the case study interview-method.

In preliminary discussions with principals, all agreed to this method of the study. The principals in the study suggested that the interview method was preferable to them as it allowed for elaboration of responses. As a result, the case study-interview method was utilized in this study.

Subjects

The selection of respondents was largely determined by the nature of the study itself and by logistical factors. As this research intended to examine the process whereby principals proceed with curriculum implementation in a school division in Manitoba, the division selected had to be implementing new curricula. The Prairie School Division (the name of the Division was changed to preserve confidentiality) was found to be implementing at least six new or revised curricula prescribed by the

Department of Education and which were accepted by the Prairie School Division for implementation in the schools of the division. The new curricula were

- 1) The Manitoba English Language Arts Curriculum 1982
- 2) The Social Studies Curriculum 1982
- 3) K-6 Art Curriculum 1983
- 4) Health-Interim Guide 1983
- 5) Computer Awareness-Interim Guide 1983
- 6) Physical Education 1981

The school division contained fourteen elementary school principals. Two of the elementary schools also contained Junior High grades. All the principals were initially asked to participate in the study.

All principals were males with a wide range of experience as classroom teachers and administrators. All have been involved with curriculum implementation in their schools and in the division. Experience in the principalship at the time of the interview ranged from one or two years to over twenty-five years of service. Principals ages ranged from mid-middle to upper middle aged.

Prior to the selection of the principals, the Superintendent of the school division was contacted by letter (Appendix A) requesting permission for the study. This was followed by a personal visit to further clarify the project. The request to the Superintendent was

forwarded to the school board for action. Permission was granted by the school board at its regular meeting held on February, 11, 1985. This permission was communicated by letter dated February, 12, 1985, (Appendix B) with carbon copies to all the principals in the division.

On receipt of the letter granting permission, the researcher then contacted all the principals in the division requesting their participation in the study. A personal letter to each principal, including the letter to the Superintendent and the letter of permission from the school board, were sent to all the principals. After allowing two weeks for receipt of the letters, a personal telephone call was made to each principal referring to the letters that were sent and again asking for their participation in the study. Two principals declined on the grounds that they were extremely busy and consequently could not participate. Twelve other principals initially agreed to participate. During the course of this telephone conversation, principals mentioned their preference for an interview study rather than filling out questionnaires. They felt that a questionnaire study would not reveal enough of the nature of the work they did in the process of implementation and, consequently, the results of such study would not have the anticipated impact. It was decided that a further call would be made

to set a date for the interview. This was subsequently done, but two other principals at this point declined on the grounds that they were also too busy, saying they were too busy implementing the new curricula to find the time for the interview. Towards the end of the interviews with the ten principals who had agreed to participate, one last attempt, which was unsuccessful, was made to get the other 'busy' principals to participate.

During the course of the telephone conversations with the principals, the method of notifying and selecting a teacher to participate in the study was discussed. All principals agreed to inform their staff of the study inviting a volunteer to participate. Principals notified their staff verbally and through the school bulletin system of the intended study. At this stage teachers were asked to participate. Subsequently, one teacher from each school was selected from the volunteers, by the principal, for participation in the study.

All teachers were females, university graduates with a wide range of classroom experience including some with administrative experience as well. Classroom experience of teachers at the time of the interview varied from approximately five years to over thirty years of teaching experience. Teachers' ages ranged from lower middle to upper middle aged. All teachers were found to be

implementing the new curricula and were familiar with the old curricula.

Instruments

As this study was to be exploratory in nature a semi-structured interview guide was designed to gather the data. The interview guide was based upon that developed by Werner (1981). The interview guide (Figure 5) contains five clusters or "implementation understandings" with probing questions that are sequentially organized and focus upon the process of implementation. Each cluster of questions in the guide was structured to elicit data about the deep feelings implementors held about the new curricula, as well as the experiences they had with the innovative curricula. Each cluster had one focusing question that provided the base for the probing questions. The main questions focused on

- 1) the rationale for change,
- 2) the scope or extent of the innovation,
- 3) an analysis of the innovation,
- 4) the implication on staff and students, and
- 5) integration (articulation) of the innovation with other school programs.

The basic structure of the interview guide has remained as in Werner's framework. As the interview guide

was modified somewhat for this study, a trial of the interview guide was made with two practicing school principals in Manitoba to determine its validity. The modified guide was administered to the principals. On completion of the trial guide, the principals were given Werner's question clusters and asked to compare that with the modified instrument. The two principals agreed that both instruments appeared to elicit the same type of data. The principals further agreed that they thought some of the questions were repetitive. These questions were eliminated in the modified instrument. Some overlap, however, was observed later in the responses to the modified guide, but this did not have any negative effect on the study.

The pilot study yielded two important pieces of information. The first was that the principal was influential in the curriculum implementation process; and the second, was that Werner's modified conceptual framework was found to be insightful for the purpose of this research, and could be utilized for the study. The pilot study also revealed that some overlap existed among the first five clusters of questions already discussed above. The overlap, however, provided valuable cross referencing of the latter part of the interview data with what respondents had said in the earlier part of the interview.

No guide was developed for the general and unstructured observations made in the overall school setting. The observations, however, were made and recorded against the question clusters in the interview guide. These observations were recorded on the reflective remark sheet (further elaborated under the Procedure Section) which is a simple sheet used to jot down quick remarks, and observations, that lend insight into some phenomena.

Procedure for Data Collection

All interviews were conducted in the various schools where respondents were employed. Teachers were interviewed in their classrooms, some immediately after their classroom instruction were completed for the day, others at prearranged and mutually agreed times. Where the interview with the teacher was conducted during regular school hours, the principal of the school took over the class. Some principals commented that taking over the teacher's class was a regular practice when teachers attended workshops or went on school visitations. Principals were interviewed in their offices or other suitable locations, usually a resource room or a spare room at mutually agreed times, more often during regular school hours but sometimes after school was dismissed for the day.

Figure 5. Interview Guide for Principals and Teachers

Question Clusters

- 1) Focus: Rationale (Why Change?)
 Why is the change proposed and needed?
 What potential benefits does the new/revised curriculum hold for your students that cannot be gained through the existing curriculum?
- 2) Focus: Scope (What are you asked to implement)
 What are the new materials?
 What are the support materials?
 What is the philosophy behind these?
 Was there a pilot program in the classroom?
 What was the response, its effectiveness?
- 3) Focus: Innovation (Are the new/revised curricula really new?)
 What are the major differences between old and new curriculum?
 What was the degree of overlap?
 Do there appear to be omissions?
- 4) Focus: Implications: (What aspects of current practice are affected by use of the new curriculum?)
 What did you have to do/learn in order to implement the curriculum?
 What resources were required (funds, facilities, equipment and inservices, etc.?)
 What organizational changes, decision making strategies, planning etc. were required?
 Is the new curriculum consistent with your beliefs, values and goals of education?
 What is the nature of your involvement in the total implementation process?
 How have the students been affected?
- 5) Focus: Articulation: (How does the new curriculum fit in with other school programs?)
 How congruent is the new curricula with the school's (Board's) mandate and its purposes?
 How does the new curriculum fit in with the current school context (e.g. building restrictions, staff competence, students?)

Source: After Werner, 1981.

In each school one teacher and the principal were interviewed separately at different times but during the same day. In each case the second respondent was interviewed immediately after the first. The procedure for setting up and conducting the interview followed the format advocated by Tuckman (1978):

At the meeting the interviewer again should brief the respondent as to the nature or purpose of the interview (being as candid as possible without biasing responses) and attempt to make the respondent feel at ease. He or she should explain the manner in which responses will be recorded, and if a tape recording is to be made, the respondent's assent should be obtained. At all times interviewers must remember that they are collection instruments and must try not to let their own biases, opinions, or curiosity affect their behavior. It is important that interviewers not deviate from their format and interview schedules although many will permit some flexibility in choice of questions. The respondent should be kept from rambling away from the essence of the question, but not at the sacrifice of courtesy (p. 239).

While the interview was semi-structured, the interviewer, as suggested earlier by Borg and Gall (1979) as well as Bussis, Chittenden and Amarel (1976), was not restricted to the outlined questions. Further clarifications and additional questions that showed promise and insights were posed. The interviewer was careful, however, to avoid deviating from the main purpose of the study. Each interview initially lasted for about one to two hours in a few instances and the data recorded on

tape. Borg and Gall (1979) strongly suggested that "the use of a tape recorder should be seriously considered for research interviews" (p. 315) because it offered "several advantages". Teachers were interviewed for approximately one hour and the data similarly recorded. The method of using teachers as interview subjects for the study was designed to correct the weaknesses in the interview method namely respondent bias and to provide a check upon the validity and reliability of the main body of data. This form of convergent validity has proven to be helpful in validating the data provided by the principals. Interviews took place during the period April - June, 1985. All recorded interviews were later transcribed for analysis.

In addition to the tape recording, a Reflective Remark Sheet (Figure 6) was used for general observations in the school setting and during the actual interview. A Reflective Remark Sheet is a simple sheet containing the focusing questions about a particular field contact. On this sheet the interviewer jots down quick remarks, observations, or opinions that may lend insight into phenomena observed and which normally would have gone by in the normal recording of data. This method improves the usefulness of the field notes and provides for a more indepth analysis of data during the data collection

Figure 6. Reflective Remark Sheet

	<u>Site</u>		<u>Date</u>
	<u>Whom</u>		<u>Place</u>
Research Questions	Rationale	Scope	Innovation
	Implication		Articulation

phase, as well as the data analysis phase. Borg and Gall (1979), as well as Patton (1980), strongly recommended this procedure. Valuable data was obtained from the observations and the use of the reflective remark sheet. For example, it was observed that many of the principals had children's writings pinned to their office walls. These were pieces of work that pupils had voluntarily brought to the principals for reading and approval of work they were doing in the curricula. These were unsolicited efforts.

Proposed Data Treatment

Subjects' responses were recorded and were later transcribed to facilitate analysis. Data analysis consisted of an examination of the interview transcripts. The data analysis undertaken included the use of qualitative methods and "critical incident technique" as described by Flanagan (1954). Flanagan's description of an incident is "any observable human activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act" (p. 327). The technique is merely the procedure for collecting the data. The qualitative method does have some limitations as suggested by Miles (1979) but has been found to be useful for this type of study.

Analysis of the data was conducted on two separate levels. The first analysis level began with a general reading and rereading of the individual interview transcripts in order to gain some general observations and develop an overview of the data. During the second reading rough and marginal notes and summary points were made where incipient themes or patterns appeared to emerge. Some sections were again read for clarity as well as to ensure that the incipient themes, patterns or interrelationships between answers and theoretical literature were indeed emerging.

When this was completed, the interview questionnaire was taken and subjects' responses to the first question cluster was read and summarized. The interview transcripts for each principal were taken and reread seeking answers to the summarized questions. A list of responses consisting of the key elements of each question was generated for each principal from the interview transcripts. The list of responses was further reduced in order to arrive at a manageable and presentable summary analysis of the rationale for change outlined in Table 1 in Chapter Five. The same procedure was used to reduce the teachers' interviews. The first level of coding clustered and summarized the data into descriptive categories derived from the research and interview

questions. The same procedure was used for all five clusters of questions. During the analysis of the data, it was observed that the responses to the question on materials in cluster 2 were similar to the responses to the question on resources in cluster 4. These were grouped under materials for the analysis. Similarly, the question on beliefs, values, goals of education in cluster 4 was found to produce some responses to the rationale question in cluster 1. These were grouped as well.

The second level of analysis was undertaken when the transcribed summaries for each cluster of question had been completed. This second level was more analytical and exploratory. Miles and Huberman (1984) noted that the idea of this level "is to indicate that a segment of the field notes illustrates an emergent leitmotiv or pattern that the analyst has deciphered while unravelling the meaning of local events and relationships" (p. 56). At this level the researcher examined the summarized data firstly seeking for patterns and relationships that were emerging and also began to speculate about these and their relationships to the available theoretical literature regarding the role of the principal in curriculum implementation. Where the summarized data appeared problematic or unclear, it was necessary to go back not

only to the original transcribed transcripts, but to the taped interviews as well, to get a direct feel of clues, pauses, voice inflections, agitation, or feeling of confidence.

As the analysis of clusters progressed and patterns among principals' behavior emerged, these were grouped and compared to leadership styles, decision making as identified in the theoretical literature on administration as well as the research/theoretical literature on curriculum implementation.

McCutcheon (1981) noted three steps in the data interpretation phase. These are

- 1) the forming of patterns accounting for the affiliation of separate phenomenon to one another;
- 2) the interpretation of the social meaning of events through "thick description", or qualitative background; and
- 3) the relating of the particulars of the setting to the external considerations such as theories (p.6).

The second level of analysis utilized the three steps as suggested by McCutcheon. To gain a clearer picture, it was found to be necessary to take the inferences and return to the theoretical literature on administration and curriculum implementation again and again. This was

done in order to develop a better conceptual synthesis of the literature and research findings.

Limitation

The interview method, like any other method of research, has its strengths and limitations. But while the utility of a semi-structured interview procedure has been demonstrated, this procedure does have some weaknesses.

Cohen and Manion (1980) and Borg and Gall (1979) among others noted that one of the problems in the interview technique is "bias". The sources of bias are found in the interviewer, the interviewee, and in the content of questions. Measures were taken, however, to reduce these sources of invalidity through careful formulation of questions so that meanings were clear and the creation of an atmosphere that was nonthreatening, objective and conducive to the interview situation. It is possible, however, that the time settings, time constraints, the time of the year and time of day may have interacted in some unforeseen manner to affect the results even though steps were taken to lessen those.

Also, by having both groups (i.e. principals and teachers) respond to the same questions and utilizing the same procedure, a sort of convergent validity was built

into the design in order to reduce response effects and biases. The critical incident technique advocated by Flanagan was found to be useful in checking upon validity of responses. Flanagan (1954) stated that the "critical incident technique is essentially a procedure for gathering certain important facts concerning behavior in defined situations" (p. 335). By using the same interview guide for both principal and teacher, the procedure was made common for both groups of respondents. It thus became easier to cross check subject responses. Flanagan further noted that with this technique

once a classification system has been developed for any given type of critical incidents, a fairly satisfactory degree of objectivity can be achieved in placing the incidents in the defined categories (p. 335).

The next step in Flanagan's critical incident technique is the drawing of inferences

in the light of relevant established principles of human behavior and of the known facts regarding background factors and conditions operating in the specific situation. From this total picture hypotheses are formulated (p.335).

The use of the "critical incident technique" or qualitative analysis is not without some drawbacks. The main weaknesses are to be found in McCutcheon's second step i.e. the interpretation of the social meaning of events, and in the first part of Flanagan's second phase i.e. the drawing of inferences. Analyses based on the

above methodology necessarily make use of the researcher's subjective interpretation of the incidents and data. It is possible, therefore, that another researcher utilizing the same data or portions thereof, may have analyzed the data differently. However, by utilizing McCutcheon and Flanagan's last phase of analysis (i.e., by relating events or inferences to established facts and theories) it was hoped that this problem was minimized.

Another limitation of the study is the size of the sample. Only ten principals and one school division in the province constituted the sample. The sample was largely urban in nature, although there is one rural school in the division and it participated. It is not known whether the sample is representative of Manitoba's principals and teachers and any generalization across the province has to be viewed with caution. What is known, however, is that all subjects have had a number of years of experience in Manitoba schools and are quite familiar with the old and new curricula.

CHAPTER FOUR

CURRICULUM REVISION AND IMPLEMENTATION IN MANITOBA

Curriculum revision and implementation in Canada is under provincial jurisdiction. This chapter will examine the process of curriculum revision and implementation in the Province of Manitoba in order to provide a background or overview of the curriculum revision and implementation process as well as to set the stage for a better comprehension of the next two chapters which deal with the presentation and analysis of the data. Guba and Lincoln (1981) suggested that in case studies knowledge of the context of the study aids in "understanding" and that "provision of this information makes it possible for ... determination about fittingness" (p.326).

Factors influencing the reform process, as well as the development of revised curricula, will be examined as they operate at the provincial level. The implementation phase and the role of the principal will be examined as this process operates at the school and division levels, for it is at these levels where implementation is affected. The revised social studies curriculum will be examined in more detail as a case study in order to illustrate the process of curriculum revision and implementation. The following outline provides an overview of this chapter.

- A Initiation Phase
- B Development Phase - Development, Piloting, Feedback and Revision.
- C Implementation Phase
 - C.1. Divisional Expectations and Strategies
 - C.2. School Level Expectations of Principals
- D Curriculum Implementation Review Process
- E Summary

Initiation Phase

Over the last decade, Manitoba has experienced many curriculum changes (see Figure 1). Current curriculum revision policy in Manitoba is centred largely on the goals of schooling as recorded in Hansard, May, 1975. The general goals of schooling are intended to prepare youngsters for living and functioning in society. These goals serve as a general guide, more of a mission statement for the further elaboration of educational policy for curriculum change and for the development of detailed curricula for the different grade levels. Leithwood, Cousins and Trider (in press) point out that problematic conditions in the environment in Canada influence educational policy and curriculum reform at the provincial level. In the case of Manitoba, the Working Group on School Program that examined the Social Studies

curriculum thought that the impending revision should reflect the "goals of education", "the realities of society at large" as well as "probable future developments" (Department of Education, 1976a, p. 5). The Working Party on the K-12 Social Studies identified a number of new developments in the social context of society (Department of Education, 1976b). These developments were further elaborated by educators and were reflected in the development of the new curricula. With regard to the need for change in the social studies, seven specific concerns were identified and outlined in a report by the Curriculum Policy Review Council (1980, pp. 6-8).

- 1) There were troubled spots in the existing curriculum as identified by teachers throughout the province, i.e., insufficient materials identified for Grade 5, too much content in Grade 6, Grades 7 and 8 history materials are too sophisticated.
- 2) There was a lack of continuity of scope and sequence between grades in the overall Kindergarten to Grade 12 design
- 3) Social relevancy of the curriculum
 - 3.1) There was observed to be a need for greater emphasis on Canadian Studies with a corresponding emphasis on the Canadian heritage and in an examination of identity.
 - 3.2) Concomitantly, there was observed to be a need for citizenship education and a civic and government dimension in the social studies program.

- 4) The concept of what is social studies had since changed the development of the existing curriculum.
- 4.1) The existing provincial curriculum was based almost exclusively upon the separate subjects of geography and history. Frequently the two subject areas are taught as something separate and distinct. Somehow the student is expected to make his own synthesis and transfer
- 5) There was perceived to be a need for a greater emphasis on economic education, social ducation, social living, analysis of mass media and other potential social studies topics that have direct application in the world into which students will enter
- 6) There was a need for the identification of newer, current materials with greater presentability and readability. Concomitantly there was a need for a fairer treatment of women, minorities, and various social classes in the curriculum
- 7) A greater concern for the specific needs of the learner was evidenced

The English Language Arts Working Party reflected similar concerns as the social studies group. Their concerns and rationale for changing the English Language Arts Program are outlined in the English Language Arts K-12 Interim Guide, 1981. Part of that rationale is reproduced here.

The multitude of new ideas emanating from research ... is one important reason for a new language arts curriculum guide. In addition society is currently imposing different and more extensive demands on the language abilities of children and adults Over the past fifteen years as new educational theory has emerged and emphases have shifted, teachers have been asked to consider the whole child,

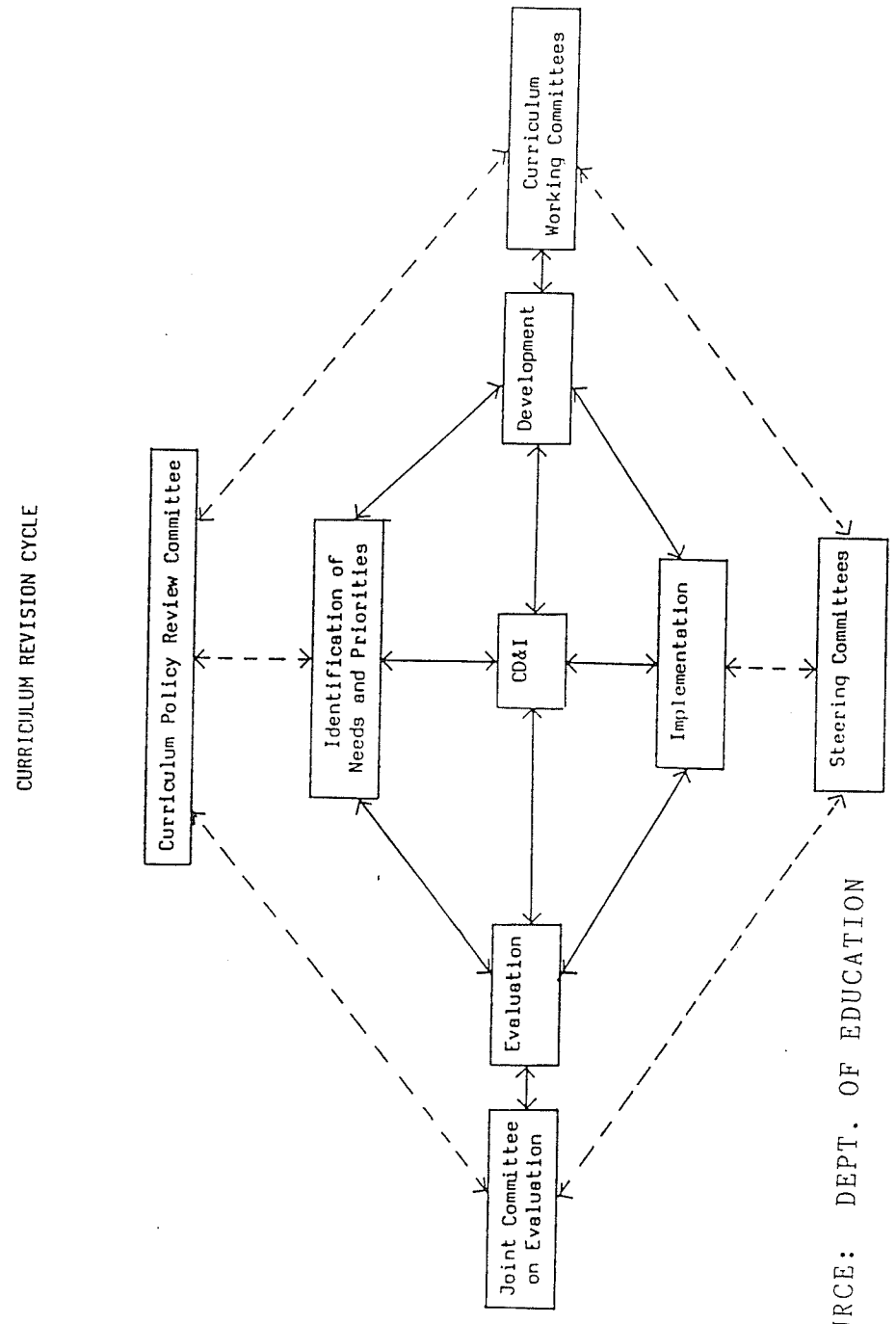
the discovery process, self-actualization, back to basics, child-centered classrooms, innovation, core curriculum, standardized testing, and a myriad of other concerns ... (pp. vii and 1).

Similar rationales and concerns have been developed or identified for other curricula that have been revised or for new ones (for example, computer awareness) that have been developed and introduced into the schools.

The model of curriculum development or revision adopted by the Department of Education includes participation by those concerned with educational issues. The main stakeholders, however, are people who are directly involved in education. At the centre of the curriculum revision process is the Curriculum Development and Implementation Branch (CD&I) of the Department of Education (Figure 7).

The Curriculum Development and Implementation Branch is responsible for the identification of curriculum needs and priorities, and the development and evaluation of programs, as well as assisting school divisions in the implementation of these programs. The main advisory body to this Branch and the Minister of Education in all curriculum matters is the Curriculum Policy Review Council (CPRC). The Early Years, Middle Years and Senior High Program Committees work through the CPRC. The Curriculum Development and Implementation Branch is assisted in its responsibilities by a number of

FIGURE 7.



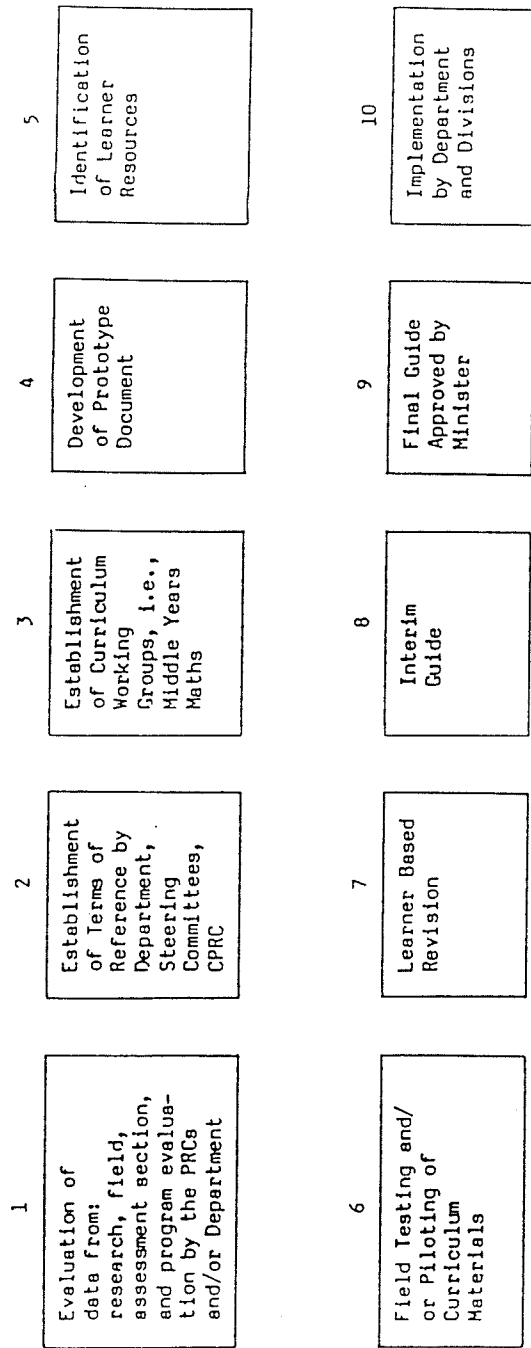
committees, working/steering parties and task forces that are involved in the development of programs. The revision process (See for example Figure 8) may take over a decade from the initiation to the implementation phase as in the case of the Social Studies. Revision of the Social Studies curriculum was first initiated in November of 1975 when a group of teachers, principals, superintendents, Faculty of Education university professors, and Department of Education consultants met at the Department of Education to discuss the K-12 curriculum then in operation and make suggestions for its improvement. The K-12 Social Studies Working Party produced a report that examined the main areas of concern as well as possible solutions.

Towards the end of April, 1976, a Social Studies conference was held to discuss the working party's draft report. Participants included members of the K-12 Social Studies Working Party, the Manitoba Teachers' Society, the Manitoba Association of School Superintendents, the Manitoba Association of School Trustees and representatives from each school division and school district. Classroom teachers from all grade levels were represented. The result was a basic affirmation of the findings of the working party as well as a refinement of and addition to the recommendations. The report of this

FIGURE 8.

CURRICULUM REVISION PROCESS

(Flowchart)



SOURCE: DEPARTMENT OF EDUCATION, MANITOBA.

conference became the framework for the current Social Studies curricula which were subsequently developed and are now being implemented. A similar process was taking place by other working parties with other curricula such as the Language Arts, or Health.

Developmental Phase: Development, Piloting, Feedback and Revision

Subsequent to the 1976 conference, three subgroups, Early Years K-4, Middle Years 5-8, and Senior Years 9-12 were established with the responsibility of developing curricula for the different grade levels in accordance with the recommendations of the conference. Educators, geographically distributed from across the province and a wide variety of backgrounds, were involved in the development of the curricula. By 1979-1980 the K-9 Interim Revised Social Studies Curricula were piloted in classrooms across the province, and revisions made. The Department also distributed the Interim Guides along with a covering letter (January, 4, 1980) to school boards, superintendents, principals and social studies teachers. The letter invited participation at regional meetings held in February of 1980. A guideline was included for discussions at K-12 regional meetings. The Department was "interested in determining the reaction of teachers,

administrators, and school trustees as representatives of the general public to the overall plan before full development takes place" (Department of Education 1980, p. 1). The Interim Revised Social Studies Guides K-6 came out for adoption in 1981 and the final Guides were ready by 1982. Implementation at the K-6 grade levels began in some areas in 1981 and others during and after 1982 (See Figure 1).

Pilot testing of the revised curricula was spearheaded by the Department of Education and included the cooperation of the school divisions. Principals were expected to take an important role in assisting their teachers with the piloting. A geographic sample of schools from across the province was selected and invited to participate in the piloting.

The main purpose of the pilot testing process - the evaluation and implementation of the revised program - was outlined by the Department to all participants. A communication system for regular and close contact was established. Developers intervened when it was necessary. In addition, workshops were held for piloting teachers with a distinct emphasis in each of the sequential phase - orientation, management, consequence (summative evaluation), refocusing. In the workshops held in May of 1980, detailed feedback from the K-9 pilot teachers was

discussed. The results were subsequently included in the final curriculum guides that were introduced in 1981-1982. With the adoption of the final guides by school divisions, implementation had begun (See Figures 1 and 8).

Implementation Phase

With the development and introduction into the schools of so many revised curricula, a new strategy was adopted by the Department of Education. More emphasis for example, was placed at the implementation level. Formerly, departmental activity slowed down with the adoption of the guidelines by divisions.

In 1982 the Minister of Education announced the reorganization of services that resulted in the creation of the Curriculum Implementation and Development Branch. The reorganization reflected the changing emphasis towards implementation and assessment of the revised curricula.

The Department, in cooperation with divisions, has conducted numerous workshops (as part of its implementation strategy) for superintendents, principals and teachers, a reflection as well, of the change in philosophy and approach by the Department of Education. The importance attached to curriculum implementation is

outlined in the Department's Administrative Handbook for Manitoba Schools. One of these assumptions identifies the process as "a shared responsibility of provincial and local levels of administration". The responsibilities of both the Department and school divisions are clearly outlined in the handbook.

Divisional Expectations and Strategies

The responsibilities of school divisions in relation to the curriculum implementation are outlined in Section 4. 03.03 of the Administrative handbook. Implementation at the divisional level is based upon these guidelines. The following are some of the responsibilities of school divisions as outlined in the handbook.

- . To plan and organize teacher-in-service in the designated curriculum area.
- . To identify subject area teachers to attend Departmentally sponsored training sessions. This step necessitates the careful identification of personal selection criteria, assigned follow-up responsibilities, and divisional resources/support available.
- . To assume responsibility for in-division training of staff.
- . To provide ongoing divisional consultant services to subject area teachers.
- . To plan curriculum implementation in the division within the broad time guidelines of the Department of Education.
- . To ensure that a majority of the eleven in-service/administrative days authorized by the Department of

Education are utilized for curriculum purposes.

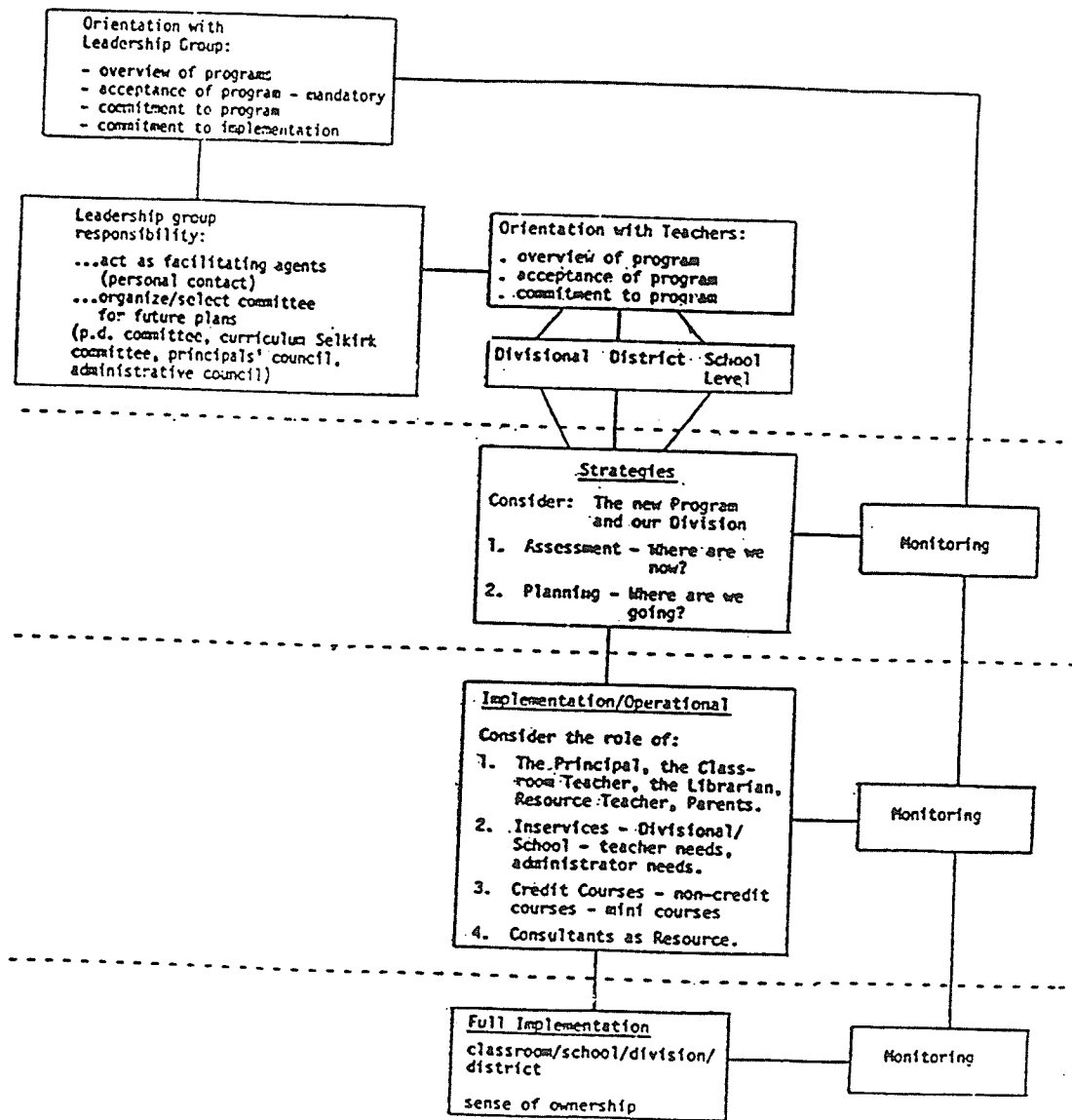
- . To establish a divisional subject area steering committee during implementation of new or revised curricula to provide a formal liaison with the Department. This committee would be composed of divisional personnel trained by the Department, a divisional consultant or program person, and other staff and would give direction and coordination to implementation strategies and activities.
- . To provide the necessary support for curriculum maintenance following initial implementation.

With the introduction of all the new curricula into the schools in the early eighties (see Figure 1), school divisions began to develop plans and outline strategies for the implementation of these curricula in accordance with provincial guidelines. An implementation model (See for example Figure 9) was suggested by the Department for use by school divisions.

In November, 1982, the Winnipeg School Division No. 1, for example, established a division-wide curriculum implementation committee that reviewed research material related to implementation and developed a comprehensive plan for curriculum implementation. The plan was adopted in 1983 and included stages with timelines (Figure 10) and strategies outlined for each stage as, well as the roles of the main participants at the school, division and board level. One of the roles that has been identified as crucial is that of school administration, namely, the principal.

FIGURE 9.

Suggested Model for Implementation



Source: Department of Education:Winnipeg.

FIGURE 10. TIMELINE FOR IMPLEMENTATION

	Awareness	Trial (1 or more units)	General Adoption	Full Implementation	Review
<u>Language Arts/English</u>					
K-3	1981-82	1982-83	1983-85	September 1985	1985-87
4-6	1982-83	1983-84	1984-86	September 1986	1986-88
7-8	1982-83	1983-84	1984-86	September 1986	1986-88
9-10-11	1983-84	1984-85	1985-87	September 1987	1987-89
12	1984-85	1985-86	1986-88	September 1988	1988-90
<u>Social Studies</u>					
K-3	1981-83	1983-84	1984-86	September 1986	1986-88
4-6	1982-83	1983-85	1985-87	September 1987	1987-89
7-9	1982-84	1983-85	1985-88	September 1988	1988-90
10-11	1983-84	1984-85	1986-88	September 1988	1988-90
12	1984-85	1985-87	1987-89	September 1989	1989-90
<u>Mathematics</u>					
K-3				September 1983	1983-85
4-6				September 1983	1983-85
7-9				September 1984	1984-86
10	1981-82	1982-83	1983-85	September 1985	1985-87
11	1982-83	1983-84	1984-86	September 1986	1986-88
12	1983-84	1984-85	1985-87	September 1987	1987-89

<u>Science</u>	<u>Awareness</u>	<u>Trial</u>	<u>General Adoption</u>	<u>Full Implementation</u>	<u>Review</u>
K-3		1983-84	1984-86	September 1986	1986-88
4-6		1983-84	1984-86	September 1986	1986-88
7-9				September 1983	1983-85
10		1982-83	1983-85	September 1985	1985-87
11-12 Chemistry	1982-83	1983-84	1984-86	September 1986	1986-88
11-12 Physics	1984-85	1985-86	1986-88	September 1988	1988-90
11-12 Biology	1983-84	1984-85	1985-87	September 1987	1987-89
<u>Art</u>					
K-3)					
4-6)	1982-83	1983-84	1984-86	September 1986	1986-88
7-9)					
<u>Music</u>					
K-9					
10-12	1982-83	1983-84	1984-86	September 1986	1984-86 1986-88
<u>Physical Education</u>					
K-12		1982-83	1983-85	September 1985	1985-87
<u>Health</u>					
K-9	1983-84	1983-85	1985-87	September 1987	1987-89

FIGURE 10 CONTINUED. SOURCE: Winnipeg School Division No. 1

School Level Expectations of Principals

In the literature review it was suggested that the principal is a key person in the curriculum implementation process. This affirmation was outlined by the Department in the November, 1984 issue of Education Manitoba which states that

... One of the most significant variables in implementing new curriculum and new ideas is the principal ... (who) plays a critical role in school improvement. The curriculum Development and Implementation Branch is looking forward to working with divisions to assist principals in developing the skills required to work effectively with teachers to meet even better, the needs of students in their charge (pp. 12-13).

The crucial role of the principal at the school level is also recognized by divisions. In its plan, the Winnipeg School Division No. 1, for example, outlined the responsibilities of the principal in curriculum implementation.

The administration at the school level should be aware of the objectives and the general content of the new curricula to provide leadership in the process of implementation. As indicated by the Chief Superintendent, they have responsibility for the implementation of new curricula within their individual schools in accordance with the plan as outlined. They would be responsible for long range planning as it relates to the acquisition of new materials and inservice programs within the school and between schools (if required). They would ensure that all teachers involved in the implementation of the new curricula have the appropriate curriculum guides and have the opportunity to review these guides and the

implications for the school organization and philosophy. They would assist in the review of the implementation process and provide feedback to the Superintendent's Department and/or the Curriculum Implementation Committee, with regard to concern related to the new curricula. Evaluation of teachers would include criteria related to the implementation of new curricula (Winnipeg School Division No. 1: 1983, p. 14).

Curriculum Implementation Review Process

By 1984-1985, curriculum implementation was well underway and attention was directed to evaluation of the implementation process. The Winnipeg School Division No. 1 for example, put out a plan for the review process in January, 1985. This plan consisted of two main components, monitoring and the review process. The monitoring objectives were

- 1) to determine the degree of implementation of selected curricula;
- 2) to identify factors affecting the implementation of curricula;
- 3) to assist the Division's curriculum implementation process at the divisional and school levels.

(Winnipeg School Division No. 1: 1985, p. 3).

Monitoring was both informal and formal. Informal monitoring consisted of the provision of feedback information to the curriculum implementation committee from principals, consultants, teachers and department heads. Formal monitoring consisted of the collection of

data through structured instruments, written or verbal feedback to the implementation committee. Information collected through this process had been used in the development of the review proposals.

The main purposes of the implementation review process are

- 1) to assess the extent to which the curriculum has been implemented;
- 2) to assess the appropriateness of the curriculum for the student population;
- 3) to assess the effectiveness of the curriculum in relation to its own objective and student outcomes;
- 4) to identify factors which explain the extent of implementation and the effectiveness of the curriculum. (Winnipeg School Division No. 1: 1985, p. 6).

The review plan called for the review process to take place when curriculum was in the full implementation stage throughout the division. Separate review plans were drawn up for the different curricula. The curriculum implementation committee oversaw the review process and made recommendations arising out of the review. (Figure 11, for example, outlines the review schedule which is currently in progress).

Since implementation of new curricula began, a number

FIGURE 11.

REVIEW SCHEDULE

Year of Review	Group	Subject	and	Level
1984 - 85	A	Science		7 - 9
1985 - 86	B	Mathematics		K - 6
		Music		K - 6
		Physical Education		4 - 6
		Science		K - 6
1986 - 87	C	Mathematics		7 - 9
		Mathematics		100/101
		Physical Education		10 - 12
1987 - 88	D	Language Arts		K - 4
		Social Studies		K - 4
		Physical Education		K - 3
		Home Economics		7 - 9
		Industrial Arts		7 - 9
1988 - 89	E	Music		7 - 12
		Physical Education		7 - 9
		Language Arts		5 - 8
		Chemistry		200/300
		Art		K - 9
		Science		100/101
1989 - 90	F	Computer Science		105, 205, 305
		Home Economics		10 - 12
		Mathematics		11 - 12
		English		9 - 11
		Biology		200/201, 300/301
		Social Studies		5 - 8
1990 - 91	G	Art		10 - 12
		Health		K - 9
		English		12
		Social Studies		9 - 12
		Physics		200/300
		Computer Awareness		7 - 9
		Physical Science		201/301
		Basic French		4 - 6

Other Curricular Areas

1. French Immersion: It is anticipated that review will occur concurrently with the English subject areas.
2. Vocational, Heritage Languages, Computer Awareness, Business Education: These will not be reviewed as part of the curriculum implementation process. When deemed appropriate, they will be treated as individual program evaluations.

(SOURCE: Winnipeg School Division No. 1; 1985)

of programs have been assessed by the Curriculum Development and Implementation Branch. The results of these assessments are being disseminated to school divisions and other interested parties. Assessments have been made in the Social Studies (1984), Writing (1982), and Reading (1987) and are in progress in other curricula areas. The Mathematics and Science curricula, introduced in the late seventies, have also been assessed throughout the divisions. Revised K-4, and 5-9 Science Programs are currently being piloted in schools in the province (Education Manitoba, September, 1988). The final document is expected to be out in the Fall of 1990 and implementation is expected to begin in 1990-1991. Details of the assessments, mentioned above, can be found in those reports which are available from the Department of Education, in Winnipeg. One of the recommendations that appear to be common to these reports is that more emphasis be placed upon implementation strategies. The final report of the social studies assessment program (1984: p. 4) noted that "Implementation efforts should be a top priority for teachers, Manitoba Education, school divisions and faculties of education". It appears, therefore, that implementation is still problematic.

Summary

It was observed that during the last decade Manitoba has undergone massive attempts at curriculum change based upon established goals of education that reflect the results of research, societal or environmental factors. The revision process includes a number of phases and the cooperation of a variety of groups with various interests in the education process. The final production of curriculum guides reflected the results from pilot programs.

It was noted that the Department of Education took a leading role in the initiation and development phases and is also active during the implementation phase. The renewed activity at this phase resulted from a reorganization of the Department and placing of more emphasis upon implementation. During the implementation phase, divisions and schools were legislated more responsibility for implementation. Principals, as heads of their schools, were identified as crucial persons in the implementation process and were responsible for implementation of all curricula in their buildings. It was noted that implementation is still taking place and that reviews and assessments of the process have been attempted. The process is still continuing. One of the results of the assessments is the identification of the need for continuing emphasis upon the implementation process.

CHAPTER FIVE

PRESENTATION AND ANALYSIS OF DATA - PART ONE

This chapter discusses and analyzes the findings of the study that dealt with the philosophical/structural aspects of the actual process of implementation. It will examine principals' and teachers' views on the rationale for change and will attempt to relate these views and perceptions to the actual process of curriculum implementation. Subjects' responses will be presented, compared and analyzed, and the implication of these will be examined. Responses will be compared to themes in the literature. The implications for practice will also be examined and analyzed. The following outline summarizes the organization of the chapter:

Rationale for change; (Why Change?)

Rationale - why change?

The curricular intentions of principals

Summary

Scope: (What are you asked to implement?)

Materials and resources

Pilot programs

Summary

Innovation: (What is really new?)

New or revised curricula

Curriculum overlap and omissions

Summary

Chapter summary.

The Rationale for Change - Why Change

Rationale: Why Change

The literature on curricular change clearly states that the identification of the need or rationale for curriculum change is a critical factor in the successful implementation of new curricula. When this need factor is identified, internalized and is congruent with the values and perceptions of the implementors or change facilitators who are directly involved in the actual implementation, the probability that any new curriculum would be implemented as intended by the developers is greatly enhanced. In this study the main change facilitators or change agents in the school buildings are the principals and classroom teachers who are directly involved in the actual implementation of the new curricula in the classrooms.

Principals are faced with numerous tasks already discussed in the literature review; it is therefore reasonable to make the assumption that the principal's conceptions about education and change will be influenced by the way s/he views these tasks. The need for the change must be clear in the mind of the principal, other-

wise surface implementation can result. It is also reasonable to assume that the above assumption about the principal may equally apply to the classroom teacher. When grade level facts and skills are emphasized as dominant curricular themes in the implementation process, surface implementation is assumed to be taking place. Bussis et al. (1976) note that surface implementors rarely "speculate beyond behavioral manifestations to consider the meaning of the behavior for the child" (p. 54), and "that teaching is basically a conduit function, with the teacher passing and 'delivering' decisions made elsewhere" (p. 59). The teacher already burdened by so many different competing aspects of the curriculum, must likewise not only see the need for change, but also be able to anticipate derived benefits of the innovation for herself and her students over what currently exists.

The data in this study indicated that both principal and teacher groups agreed that there were sufficient reasons for changing the curricula in the schools. However, all subjects were not in total agreement with all the reasons.

In this study the curricula being implemented and most often referred to by the sampled elementary principals and teachers were:

- 1) The Manitoba English Language Arts Curriculum 1982
- 2) The Social Studies Curriculum 1982
- 3) The K-6 Art Curriculum 1983
- 4) Health-Interim Guide 1983
- 5) Computer Awareness-Interim Guide 1983
- 6) Physical Education 1981.

To a lesser extent, the elementary Mathematics, Science and Music curricula were mentioned but these curriculum guides were introduced much earlier and were already implemented when the study was conducted. The music guide, however, was much newer than the former two.

In Manitoba the need for curriculum change or revision was recognized by some principals and teachers prior to the actual development and adoption of the new/revised curricula in the schools. Some of the principals and teachers who participated in this study were actively involved in various curriculum committees that helped in the development of the new curricula. Their participation in these committees assisted in providing, in some instances, a sort of advanced commitment for implementation. Where principals and teachers participated in these committees, they appeared to have a firm grasp or understanding of the rationale for curriculum change. These subjects appeared to have a clearer conception of the intent of the curriculum and

consequently were quite active in attempting to spread the message to their colleagues. These subjects also had a good grasp of the actual implementation process itself.

Both groups - principals and teachers - advanced several reasons for curricular changes. These reasons appeared to be based on the perceptions and ways of thinking of the subjects, on their professional experience and expertise, on their readings of the research literature in the various subject fields for example, in the Language Arts and the Social Studies, on their observation of society in general, on their relationship with pupils and on administrative directive from superiors.

All principals and teachers saw the need for changing some aspects of the school curriculum, the introduction of new curricula (for example, Computer Awareness) or the modification of others. Many of the reasons advanced by both principals and teachers are remarkably similar. For example, all principals and teachers agreed that the Social Studies curriculum needed changing because of several factors - outdated content and materials, changing societal and children's needs as well as methodological changes from passive acquisition of factual data to a more active way of learning - to extract meaning from data, from more product to more process orientation.

Table 1 and table 2 present principals' and teachers' perceptions on the rationale for change. Both tables, 1 and 2, show some similarities among some of the rationales presented by the two groups of change facilitators. These rationales may have been derived independently by each group based on their professional and classroom experiences, or from interaction with one another and with professional organizations such as the International Reading Association (IRA) and Children Early Learning (CEL). Since some principals and teachers belonged to professional organizations and attended conferences and professional development workshops, it is very likely that some of their perceptions regarding change were influenced by these professional sessions. Some subjects indicated that they were indeed influenced by these professional associations and workshops.

For some principals and staff, the process of arriving at these rationales for change was not easy. The process differed with the various curricula. Both groups, principals and teachers, readily saw the need for change and understood the rationales for the Health, Art, Computer Awareness and some aspects of the Social Studies curricula. These curricula were relatively easy to follow and implement within the traditional classroom practices. Certain aspects of the Social Studies document presented

Table 1

Principals' Perceptions on the Rationale for Change

Reasons for change as stated by teachers	Percentage of total group N=10
1) New theory on learning; (same as) new research on teaching and learning.	100
2) Outdated curricula	100
3) Relevance of curriculum; (same as) meeting children's needs; children are changing.	100
4) Knowledge explosion; (probably same as) new content; keep up with changes that impact upon education.	60
5) Technological changes e.g. science, computers etc.	40
6) Political advocacy e.g. peace studies; multiculturalism; need for more relationship of the individual child to the problems of society.	20
7) Administrative mandate and advocacy (province, school board).	30
8) Professional advocacy by interested groups e.g. I.R.A., C.E.L.	30
9) Changes in community health problems e.g. drug abuse. AIDS.	30
10) Changes in emphasis (methodology that is more congruent with learning theory); need for more process and less memory of facts; more concept development.	70
11) To facilitate classroom instruction e.g. physical education.	10

Table 2

Teachers' Perceptions on the Rationale for Change

Reasons for change as stated by teachers	Percentage of total group N=10
1) New theory; new philosophy; more research in child development, teaching and learning. (Same as) need to bring curriculum in line with research.	70
2) Outdated Curricula.	70
3) Relevance for children's, (same as) childrens' needs are changing and Language Arts not meeting all children's needs.	70
4) Knowledge explosion (new content etc.).	40
5) Technological changes e.g. computers, science; (same as) time changes, changing world.	40
6) Political advocacy e.g. a more diverse group of children coming into the schools; society is different than before; family situations are different e.g. single families.	20
7) Administrative mandate.	10
8) Professional advocacy e.g. CEL.	10
9) Changes in community health problems e.g. drug abuse, AIDS.	20
10) Change in emphasis (new pedagogy/ methodology that is more congruent with learning theory); more emphasis on process, less on content/facts; teacher is more of a facilitator, more child centered, the whole child.	80
11) To facilitate classroom instruction.	0

some problems, but these were not insurmountable. The need for change in the Social Studies was clearly understood by both principals and teachers.

The need for change, then, was obvious to educators in some curricular areas. An examination of society in general, pinpointed the need for change. Some of the reasons for the change were the increasing migration of the population, multiethnicity, increasing abuse of drugs and the increasing technological nature of society. All these factors made it easier to comprehend the necessity for changing the curricula to become more relevant to the needs of pupils. Outdated curricula or passive learning activities in a changing technological society was easily recognized by educators and a case was made for change. These factors were recognized by all principals and teachers in this study. However, this was not the case with every innovative curricula.

The new English Language Arts curriculum, incorporating a philosophy of holistic education and integrative pedagogy, was problematic and presented some thorny problems for most principals and some teachers. The philosophy engendered in this new curriculum required a paradigmatic shift, not only from entrenched pedagogy, but also in the way the subject disciplines themselves were to be viewed and treated. The principals felt that

the Language Arts curriculum needed improvement. However, they had considerable difficulty in understanding the document largely because the underlying philosophy of the document called for a radical shift from current classroom practices. It was simply a different paradigm. Was the nature of the change warranted? Initially, principals were skeptical and hesitant to accept the document at face value. They had to be convinced of the rationale for change in this aspect of the curriculum. Principals were mandated to implement the curricula presented to them by the Department of Education and the School Board.

However, in order to implement them, they not only had to be convinced themselves, but also they had to convey this rationale to their staff as well. Some staff readily accepted the new curriculum. Others at the time of the interview were very skeptical. They had to be convinced that the change was indeed warranted. The older curriculum guides and their accompanying instructional strategies, for the most part, compartmentalized the teaching day into specific periods. There were blocks for Social Studies, blocks for Language Arts, and blocks for Physical Education or Music.

It appeared that the concept of the integrated day had receded if it had already been not altogether forgotten. Some teachers integrated their teaching

activities with the old curricula and were doing so with the new. The principals claimed that the teachers were not prevented from using such a methodology in the classroom. One teacher did not think the integrative concept that was emphasized in the new curricula was new at all, and referred to the curriculum guides from the 1940's and 1950's to substantiate her claim. This factor is what Fullan (1982) called "false clarity".

The introduction of the new English Language Arts curriculum as well as the Social Studies curriculum and their accompanying suggestions for integration in all instructional areas served to refocus the task of teaching and learning. One principal described the rationale quite succinctly when he suggested the change was welcomed and rejuvenating. With the usage of the curriculum guides over time, this principal observed that:

everybody follows it in their own way and all of a sudden from school to school and from teacher to teacher they have all been following it in their own way, and as it becomes older and older their own ways get more disparity between what they are doing. So again the removal of curriculum (i.e. old curriculum and the introduction of the new ones) draws everybody back to focus again So the need for it, if nothing else, is rejuvenating.

The underlying philosophy and methodology inherent in the new Language Arts curriculum were problematic for about half of the principals and a few teachers who had

considerable difficulty in coming to grips with the "holistic method" of the Language Arts. The impression here is that principals and staffs were not so much perplexed by the new methodology but rather in coming to grips with the objective reality of their past or current practices. They could not repudiate their practices at the stroke of a pen. This fact was quite clear to all the principals. One principal suggested quite emphatically that "there is no way you can throw out everything you've been doing and say that's all wrong". Another said, "I don't believe for one moment what we've been doing is wrong. What was, served its purpose and did what it was supposed to do, and now we find something new and we are trying to adopt and adapt to that". Yet another principal rationalized that the new Language Arts "represents not something that is new but in fact a new kind of content". He further noted that, "the hardest thing about that is changing people's philosophy and that takes time. That takes attitude change, belief change and ...".

Another principal commented that old traditions die hard and no matter what he did some will still not see the rationale for change. One teacher, commenting about change, noted that this was a difficult thing and that many teachers who have had a number of years of experience are reluctant to change.

These principals' statements reveal some inherent contradictions with regard to their staff and themselves. On the one hand, teachers who found it difficult to accept the holistic philosophy of the new Language Arts curriculum indeed claimed that the methodology inherent in the guide is not new. One even suggested that the curriculum had gone full circle. A principal commented that Plato would laugh if he were to see the new curriculum.

Perhaps the problem was not in the philosophy or in the curriculum itself, but in the inadequacy of the preimplementation training sessions. Most of the teachers interviewed, and indeed some of the principals, thought that there should have been more professional development that focused upon implementation.

If all the teachers and even principals had not fully conceptualized their intents of the curriculum, how then were they implementing the changes? If their perceptions and ways of thinking and doing things were not congruent with the suggested philosophy and methodology, could they be implementing only a "surface curriculum"? All subjects stated that they were implementing the new curriculum. However, this study focused largely on the interview methodology, no detailed observations were made of actual classroom practices. Some observations were made of

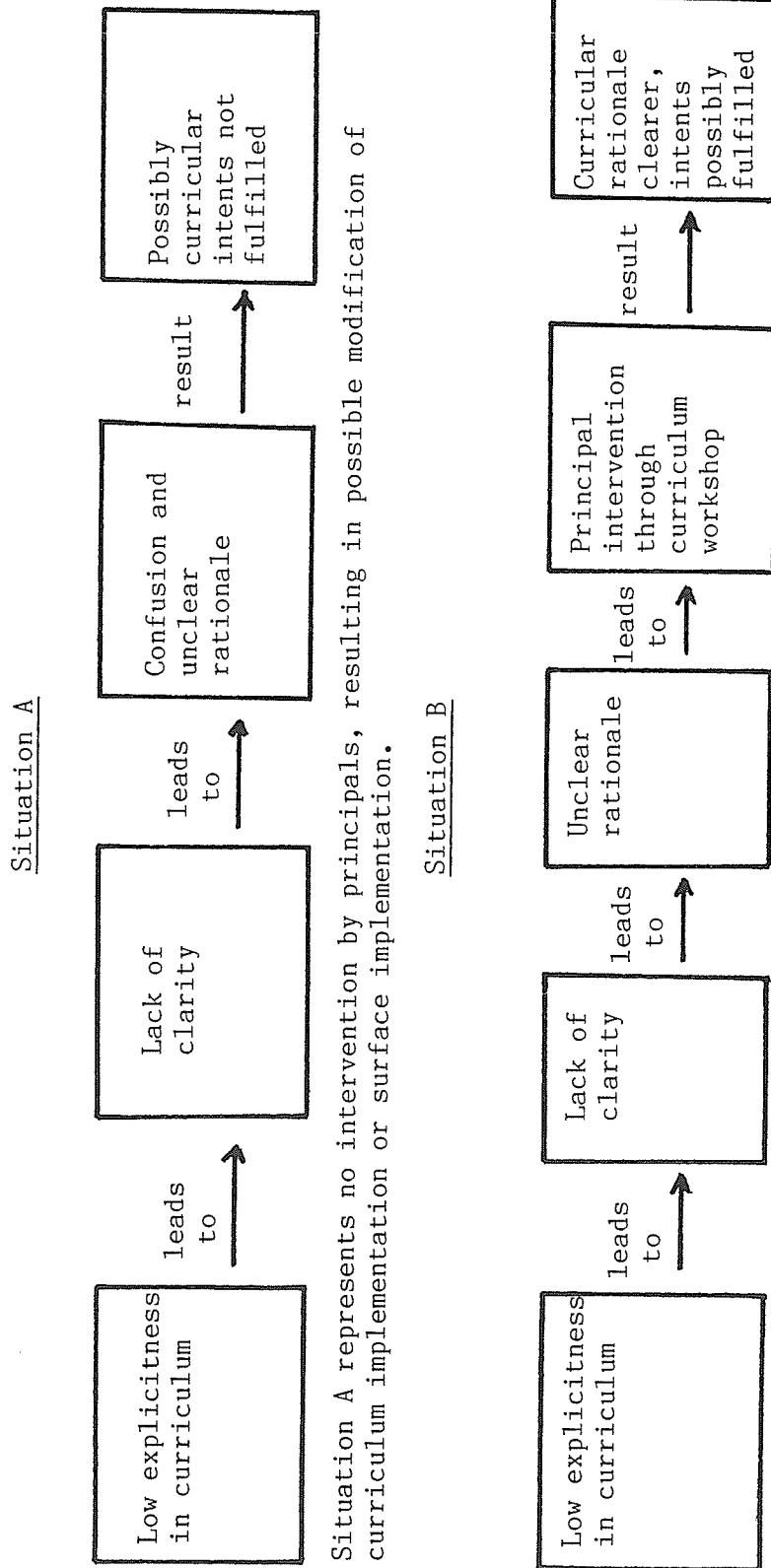
classroom layout, organization and materials, but these were necessarily limited because of the time factor and were made during the actual interviews. Further study is needed to clarify the extent of "surface" or "deep" implementation defined below. The literature however, offers examples and circumstances of surface implementation. For example, Aoki (1983), Bussis, Chittenden and Amarel (1976), and Fullan (1982), suggested that indeed in such instances where the curricula intents were not conceptualized fully, surface implementation may very well take place. In this study about 50% of the principals and teachers appeared to be involved in deep curriculum implementation. Principals, however, insisted that they were concerned about getting teachers to implement the intents of the curricula. Further study is needed to clarify this problem. Bussis et al. (1976) described deep implementation as showing "awareness, purpose, understanding, reflection, sensitivity and reciprocity" (p. 54) in ones thinking and actions. They posed the question, "what does the teacher want children to know, do, feel, think or care about? In short, what are the teacher's intentions in teaching?" (p. 50). To the extent that a principal or teacher shows "concern for engaging the totality of children's cognitive and/or emotional resources" that principal/teacher is engaged in

deep implementation.

Where the rationale for change was not immediately clear as in the case of the Language Arts, notwithstanding the results of research and development of new learning theories, some principals embarked upon a particular strategy: first to understand the intents of the curriculum; second, to convince themselves that the new document indeed represented a superior or more effective mode of learning; and third, to convey this rationale to their staff (see Figure 12). This is a very important factor and as indicated in the literature, the concept of clarity is critical for successful implementation.

Principals employed a variety of strategies to accomplish this goal. One principal requested that teachers submit an outline from the curriculum of what they intended to do during the next month or term. Some principals held staff discussions on the curricula, while others sought out professional reading materials which they provided to their staff. Half of the principals held a series of informal staff discussions reminiscent of Lewin's (1947) concept of "unfreezing", during the lunch periods where sections of the curriculum were taken and analyzed in order to understand the rationale for change. One principal noted,

FIGURE 12. Clarification of the Rationale for Change through Principal's Intervention



Situation A represents no intervention by principals, resulting in possible modification of curriculum implementation or surface implementation.

Situation B represents intervention by principals, resulting in clearer curricular intents/rationales, implementation as intended and possibly deeper implementation.

That's probably one of the most useful exercises that we did in convincing ourselves of the need for change and where we are going. It was a very useful exercise. Without that I don't know whether I, in fact would have felt as strongly towards the need for change.

All principals stated that due to their heavy duties in the school, which included teaching, for about half the principals, they were forced to spend extra time away from school, mostly at home, familiarizing themselves with the curriculum guides. A few indicated that this task was done as bedtime reading.

These informal sessions supplemented the curriculum implementation workshops provided by the division. It may be noted that while these divisional workshops were somewhat helpful, both teachers and principals stated that they were merely general orientation sessions and as a consequence not very helpful for the classroom teacher. Also not all teachers in the school attended these workshops. Consequently, there were gaps. These informal sessions conducted by principals served to fill in the gaps. In many instances both principals' and teachers' comprehension of the rationale for change was the result of some of these informal educational sessions (for example, see Figure 12). Some similarities of the rationales for change presented in the interview data by both groups can be explained by these interactions.

Considerable variation exist in the number and, to some extent, the nature of the rationales presented by the principals. All principals examined all the recent curricula (but not with the same detail) that came into their schools and were readily able to provide rationales for the innovation for each of the curricula. A few principals who did not appear to have examined the curricula in detail, generalized the rationales over the entire spectrum of new curricula. For example, one principal noted that the rationale for change was the development of the new theory on learning in the Language Arts, Health and Social Studies. Another principal who was quite involved in professional associations in various curriculum committees described the need for change in the Social Studies as follows:

I saw the need for more relation of the individual child to the problems that were presented in the curriculum and not necessarily so much as a historical study or a geographical study of an area, but how that child could view other people living in that kind of situation and how s/he would operate in that kind of situation. I think that was important to me, the focus of the child How and where a child fits into his place and in the world and how s/he views other people, and how s/he would react to those situations rather than a bunch of facts.

With regard to the Language Arts, this principal noted that there was a need for more writing and reading rather than the mechanical skills oriented sorts of

things suggested in the old curriculum. He further noted that they

are using the sociolinguistics model now and tapping the resource of the child in terms of his learning and, learning naturally to read and do other things the way he learns to speak.

So you're not taking little bits of stuff and building up hopefully or putting those together, but what you are doing is putting the whole part and moving from there.

Clearly this principal was thinking of the deeper structure of curriculum as defined above.

Are there differences in the curriculum constructs of these principals? Do these differences influence the perceptions of these principals and how are these perceptions related to implementation? It appeared that the more a principal was involved in instructional leadership with his staff, with curriculum, with instructional management behavior and professional development, the more rationales for change he was able to articulate. He was able to offer a deeper view of curriculum as defined above.

Principals who were more actively and deeply involved with the curriculum implementation practices were able to give more concrete examples where changes were needed and of benefits derived from the new curriculum. These principals were able to cite these benefits in support of the rationale for change. Such rationales for change and

commitment, as a result, appeared to be further strengthened as the curriculum was implemented. This in turn appeared to lend further credence and commitment to the implementation process. Some teachers who were initially skeptical about the rationale(s) for change became later converts as they began to use and implement the curriculum. The rationale for change, then, emerged with some staff after the actual implementation process began. And it appeared that some principals were responsible for helping to bring about this change. Those few teachers whose curriculum constructs were firmly set and hardened were slow or somewhat reluctant to appreciate the rationale for change in the Language Arts particularly. They were not entirely impermeable to the new changes because of "the new winds blowing" through their schools as stated by a teacher. One teacher responded to a question about the philosophy quite frankly:

I personally just cannot go along with all the philosophy that's there, yet I know the thinking that was behind it because I've taught it for four years. My philosophy is that we should learn how to spell and write correctly I'm still old fashion and I haven't quite got over that.

This teacher further noted that "there are some very nice things happening in the curriculum" and that "children have a lot more creativity, more so than before".

An interesting observation about this teacher is that

while she may have been concerned with grade level facts and skills as her dominant priorities, her conventional beliefs and mode of thinking about curriculum were slowly changing, and in fact when questioned about her feelings on the new curricula she thought that they were laid out well, that some were good, but she was not too excited about others, viz., the Language Arts curriculum which she was "struggling with". She clearly indicated that she was implementing the curriculum without "any difficulty". It may also be noted that this teacher sat on one of the provincial curriculum committees, had piloted the Social Studies and the Computer Awareness curriculum for her school, and was a resource person in the school helping with the implementation of the new curricula. The Language Arts curriculum, however, was a different matter altogether. Her sentiments about structure in grammar teaching were shared by her principal who noted:

I still believe if you're going to teach sentence structure, you need to know the parts of speech, you need to know how to correct the sentence, you need to know the clauses etc. That's in the curriculum but it's spread out very thin and somewhere I would wish someone would very easily condense it and say for grade 6, here are the skills we would expect to see in grammar.

Both this teacher and the principal felt that there should be some balance between the mechanics of writing and creative expression expounded in the new curriculum.

Yet, the principal of this school had a great deal of confidence in this teacher, and in fact had delegated implementation responsibilities to her for the Computer Awareness program; she also implemented the pilot Social Studies program in the school. The presence of incongruence in beliefs and task expectations (Fritz, 1981) resulted in the above teacher displaying a high measure of agitation. Getzels (1963) described this conflict over perceived role expectations. While an extremely high degree of application, consciousness and fidelity to duty was displayed here, it is the belief of this researcher, that a more "surface" level of implementation was practiced by the teacher and tolerated by the principal. The principal himself displayed beliefs that indicated he was in favour of a deeper level of curriculum implementation. Yet, there was a lack of congruence between belief and practice. Tannenbaum and Schmidt's (1958) explanation that a leader can vary his style of leadership in differing situations is perhaps applicable. But a more direct explanation is given by Blumberg and Greenfield (1980) who suggested that the contextual situation is important in seeking explanations, for such behavior and that attention must not only be focused on the principal but on the structure and dynamics of the school as an organization. In this organization the

teacher was an influential person and held in esteem by her colleagues including the principal. She was an industrious and conscientious worker who was implementing the curriculum and had taken several leadership roles.

Perhaps it was better or more pragmatic on the part of the principal to allow her to continue as she did, and slowly try to inculcate her into the new philosophy as time progressed. One teacher who had observed similar feelings among her colleagues commented:

The teachers that are finding it more difficult are the ones that have not understood or internalized that concept of the switch from content to process. And if you haven't made that switch then your framework for thinking isn't quite appropriate.

And yet another teacher from another school had this to say:

I think the approach is very different from what we're used to in the past ... when you've been teaching for a while and there is a dramatic change needed, not everyone adjusts to a change like that very easily.

It may be noted as well that a few principals while agreeing to the need for change in the Language Arts nevertheless, had some concerns like the teachers above about the structure of the curriculum guides. These concerns were similar to those indicated by the said teachers.

What were these principals looking for in the curriculum? What did they want the children to know,

learn and experience? What qualities did they value and want to implement? In short, what were the curricular intentions of these principals? Were these intentions included in the rationales accompanying these programs, and were these met in the older curriculum guides? If not, would the new guides meet these needs? The case just discussed above lend some insights. A more detailed analysis follows.

The Curricular Intentions of Principals

When questioned about the functions of a curriculum, principals' responses were remarkably similar in that they all stated that the curriculum should serve as a guide of core activities which teachers can follow reasonably closely. They thought that the curriculum should be flexible enough for teachers to use various approaches and individual expertise to carry out the intents of the curriculum and to meet the needs and interests of the pupils.

The following (Table 3) presents some initial feelings about curriculum as expressed by all principals in the study. The feelings and perceptions of two or three principals will be presented in more detail and further explored to show variations in principals' perceptions. It should be noted that while some

principals speak about curriculum in general, a few specifically focus upon a particular curriculum.

Table 3

Principals' Perceptions of Curriculum

- 1) (Curriculum) - a guide for teachers to use in their classrooms to meet the needs and interests of their pupils - but pretty broad for the teachers' initiatives.
- 2) Some guides as to what some of the core activities that can be covered at each grade level ... we should be relying a little bit more upon these guides and less on the so called good teaching abilities of the teachers ... we should be relying on that expertise (i.e. the expertise of the developers as expressed in the guides).
- 3) Should meet the needs of various individuals ... get away from the facts, more on understanding the inter-relationships with people Look at how people interact, think ... respond ... agree, disagree and why ... why causes people to live in the way they do.
- 4) I feel pleased at how things are going in the new curriculum. I think they are relevant (to students' needs). We're happy that they are there.
- 5) The curriculum fits with what we want to do - meeting needs of kids. It's a guide to teach and teachers

could follow reasonably closely.

- 6) Long ago it was this text, that page, confederation. Whereas now, there are lots of new approaches and ideas (based on new learning theories) for related activities in the new curriculum which I like and which was needed.
- 7) Curriculum is the best possible vehicle to provide the best education for children. I would say right now that our children are getting a tremendous education and it's all related to the curriculum guides and training of teachers.
- 8) We are using and tapping the resources of the child in terms of his learning and learning naturally With my own staff, I was agitating for change long before ... so when this new curriculum (meaning the Language Arts) came out, it was like a godsend to me.
- 9) I think we're on the right track by the whole language philosophy (in the Language Arts). I have agreed with the revision ... I think it's necessary.
- 10) It's a guide in terms of core content ... I think there is tremendous room to maneuver and I'm very suspicious of any teacher that starts on page 3 and end on page 7 and work on nothing outside of that ... I think it's more justified. It's focused on the

youngster. That, I think is very important.

Clearly, from the above observations, a general consensus appeared to have emerged about principals' perception of curriculum. Curriculum is viewed as a guide with enough latitude for the implementors to bring in their expertise to meet the needs and interests of pupils.

Yet, in the examples of principals' curricular perceptions illustrated above, variations emerged as to the nature of these perceptions. Take for example principal 2, this principal believed that there has been an expressed need for a curriculum which has been developed by a cadre of experts. The perception here is that the classroom teacher may not necessarily be an expert in that particular field; therefore, s/he should follow the guide as developed. This principal appears to be viewing the curriculum as stressing grade level facts, skills or whatever as dominant curricular themes. If this is the case, then this principal's perception of curriculum fits Eggleston's (1977) ideological model called received perspective. The received perspective is a dominant educational model, a received body of understanding that is given, even ascribed, non-negotiable, essentially non-dialectic and consensual. It is not

unlike the rationalistic model referred to in Chapter One.

There appears to be some contradiction and inconsistency in some of these perceptions. On the one hand, this subject believed that curricular change was needed in view of new research findings, but on the other hand, he felt that curriculum should be closely adhered to and implemented as prescribed. Principal 3 who had perceptions of a "deeper" curriculum also felt that the suggested curricular topics should be covered by the teacher. He noted that

I'm one of those that still believes that the curriculum says 6 unit, I hope that my teachers get at least 5 of those done. If we aren't, I want to know why".

Rather than being a contradiction, the feeling of this latter principal was that the curriculum should be monitored, evaluated and reviewed as to whether it is realistic in the contextual sense. This principal is interested in knowing why the units are not covered. Were the units too difficult? Were there too many interruptions? Is it the changes themselves? When the observation quoted immediately above is added to the feelings expressed in Table 3, the impression is that this subject is looking at a much more synthesized and integrated aspect of the curriculum. This subject is displaying awareness, understanding, purpose and reflection, all

characteristics of a deeper appreciation of the curriculum. The reader may be tempted to characterize this principal's thinking as being more congruent with Eggleston's other ideological model, the reflective perspective, which is essentially more assertive, negotiable, dialectic and flexible, except that the reader gets the feeling that this principal views curriculum as knowledge that should be covered by the teacher. Perhaps this principal, like the previous one, operates within the framework of the dominant paradigm. These new curricula, however, are not narrowly prescriptive, but rather are open and offer much latitude for the implementor's understandings and judgement. Consequently, the newer curricula were seen to be superior to the old in that the new curricula were viewed as being in the service of children, engaging the totality of their cognitive and affective abilities. The new curricula offered the opportunity for deep insights and speculations that go beyond the apparent surface behavioral manifestations of pupils. Most principals appeared to recognize that this was the direction and thrust of the new curricula, particularly the Language Arts and Social Studies. The same perceptions were not held for every new curriculum. For example, those principals who talked about the changes in the Health

curriculum did not feel that those changes were as dramatic as the changes in the Language Arts or the Social Studies.

The Language Arts and Social Studies are the two most frequently mentioned curricula. Both principals and teachers felt that these curricula, as existed, were not meeting the needs of the pupils. With regard to the Language Arts one principal noted:

The change was needed because we just weren't heading in the right direction as far as developing an overall content of language in kids. And the new curriculum certainly does that, much more of that program for developing in kids, some idea of what language is all about and why they're learning language and where they're going in it rather than just taking a reader and learning how to read which is what the old program was. And I have seen a lot of good things happen in the language area.

With regard to the Social Studies, this principal further noted the differences between old and new.

The Social Studies is another one we've been involved with a fair bit. The new curriculum I think there does somewhat the same as the Language Arts. It's giving the kids a better understanding of what history is all about and also giving them a better understanding of local community life that the old curriculum did not. It is easier to relate to in terms of where kids are today.

Like his colleague just mentioned immediately above, another principal focused his discussion on the Language Arts and Social Studies.

The old guidelines were very skill oriented

and the new programs have the emphasis on the child for example, the Social Studies. The old curriculum in Social Studies was also skill oriented and in terms of the materials that we used, we can still use those materials that we have from before, but we will use them in a way that is adaptable to the situation we are in now. Just because we have a new Language Arts curriculum doesn't mean that we have to throw out all those materials. Those materials can now become resources but they are not the program.

As for what was happening with the old curriculum, it called for certain things to happen in the area of skills. Publishers get hold of those sort of skills and developed their program and the teacher had it. It's like a recipe book, like a menu. The teacher would follow it and in my estimation any parent or an aide who could read, could follow that recipe and present it to the children. Whether there was any learning taking place or not it's difficult to assess.

Now with the new program the teacher has to develop and build; build upon that. And to me, that is value, because it puts the education in the hands of the professionals - the way it should have been all along.

A professional teacher has to be able to say why I'm doing something and be able to do something with the kids, but yet say why I'm doing this.

I don't think the teachers should ever do anything with the kids unless they say why they are doing it. Before, they weren't. They were just following blindly through the guide. I'm not saying the teachers were doing a poor job; they were just doing what they thought was best.

It seems clear that these latter two principals are concerned about reflectivity of intentions, beliefs and actions not only of the teachers as implementors, but of the pupils as well. They are concerned that the teacher and child speculate about the meaning of their behavior.

These principals see both the child's and teacher's reflective power in a more dialectic perspective lending true meaning to curriculum with learning and development having a sense of purpose. Therein lies the "deep" meaning of curriculum. To these principals the new curricula appear to lean in the direction of reflectivity, whereas the perception of the old curricula did not. This latter perception about curriculum appears more in the mold of Eggleston's "reflective perspective".

For this latter group of principals, it appears that a curriculum that has an inherent design factor that allows for a teacher to make critical analytic reflections of planned activities would be superior to one that does not cater to this problem. The critical tool of reflective analysis would create, for constant and conscientious evaluations of program delivery and would act as a system of feedback loops, triggering alarms when things start to go awry. It seems that the new curricula offered these benefits, whereas the old were somewhat deficient in this aspect.

Summary

The rationale for change has been presented as one of the critical factors dealing with the change process. When the rationale(s) is (are) clear to change facili-

tators, there is a strong probability that the change would indeed be implemented. The research literature is clear on this point. In this study all principals saw the need for change and believed that the change was warranted. Principals, however, varied in the number and nature of the rationales they presented. Some principals were able to examine all the innovative curricula and come up with rationales for each, whereas other principals who did not go into a detailed reading of the curriculum guides generalized the rationales across the entire curriculum. Principals who were more deeply involved with the implementation process, and had spent more time in professional reading, including more indepth reading of the curriculum guides, appeared to generate more rationales than principals who were less involved. The data indicates that some variations exist in the behaviors of the principals. There are those who are very actively and deeply involved in implementation; those who are involved but not so deeply; and those who are involved but in a more facilitative way. This group of principals would probably fit somewhere in the three hypothesized styles initiators, managers and responders discussed by the Texas group of researchers mentioned in Chapter Two. Indeed one principal described himself as a "responder" while another characterized himself as an

"initiator". The data indicates that at least three or probably five of the principals in the study are "initiators" as described by Hord and Hall (1987). This grouping would be explored in further detail in Chapter Six.

Not all teachers and indeed one or two principals had some difficulty accommodating the changes. It was hypothesized that the changes somewhat represented a new paradigm. Some of the data presented so far appear to lend support to this assumption. It was also noted that some of the difficulties in accommodating to the changes were the inadequacy of the orientation sessions.

In order to develop a clearer conception of the rationale for change, a number of principals embarked upon various strategies which included informal educational sessions during luncheon periods. It was noted that these sessions were somewhat effective in conveying such rationales for change. It was felt that where such rationales were not clearly perceived, surface implementation would result. However, more research is needed to clarify this problem. Some staff who did not clearly see the rationale for change in one or two areas reflected, however, on the changes that they noticed in their classrooms among their pupils.

Principals generally felt that the curriculum should

serve as a guide and be flexible enough for teachers to use various approaches and individual expertise in order to carry out the intents of the curriculum. Teachers on the whole shared this perception.

Again, like the variation in the rationales, principals varied somewhat in their perceptions of curriculum. All felt the curriculum should serve the needs and interests of pupils. But whereas some felt that the curriculum should be amendable through critical analytic reflections, a few felt that the curriculum should be implemented as designed. The data appears to indicate that both surface and deep implementation are taking place. The literature has offered sufficient evidence that even where there is the semblance of deeper implementation surface implementation may actually be taking place. All principals seemed to believe that the new curricula are much better than the old and offered benefits that the old curricula did not provide for. For example, children were viewed by principals and teachers as freer, reflexive inquiring individuals rather than mere passive recipients of factual information. Observation by this researcher of children at work in the school environment support the statements of the principals and teachers.

Scope: What are you Asked to Implement.

Materials and Resources

It has been argued in the implementation literature that the availability of adequate quality and suitable materials are critical to the effective implementation of new curricula. The lack of or unavailability of such materials and resources do impact significantly upon the failure or success of any innovation. Studies from both Canada and abroad provide sufficient evidence that where such relevant program materials were not available, failure to implement was partially attributable to the lack of these materials. Fullan (1982) noted that where such materials were "complete, well organized and detailed," (p. 60) implementation was more effective.

An examination of perceptions of the innovative curricula reveals that most principals and teachers felt that the new guides, except for the Language Arts in the case of a few principals and teachers, were well-organized, very helpful with lots of suggestions for alternative activities, and easy to use in different grades. These guides were available in all schools and both principals and teachers had access to them and were quite pleased with them.

Two or three principals and two teachers interviewed found some difficulty with the Social Studies curriculum.

The problem of over explicitness has already been examined. One teaching principal expressed some concerns about the philosophy of the multi-text approach as suggested in the Social Studies guides. He thought that this approach was difficult for elementary and intermediate pupils to deal with. He observed that

It is very frustrating for students at that age to be able to understand that different people write different things and that the written word is not all the truth.

He further noted

I know the elementary levels are having a very difficult time with that. And so teachers are having a difficult time with being able to handle that for the kids.

So, in terms of suggested approaches and materials, the experience of this principal was that the multi-text as used in the classroom at some levels presented instructional problems and, hence, implementation problems. Two teachers felt that there were some aspects of the Social Studies curriculum that were too advanced for primary children. One of these teachers felt that the materials that were available were above grade level.

The principal who experienced difficulty with the multi-texts, felt that there were lots of materials that were available, but as he taught half-time, he found it difficult to find enough time to peruse and review these materials in order to make the right selection. Likewise,

a number of principals mentioned that the lack of time hindered their efforts. Moreover, the difficulty of obtaining support materials from the Department of Education, combined with budgetary problems, affected the implementation strategy of this principal. Teaching units were postponed or modified. The final report of the Manitoba Social Studies Assessment Program, 1984, reported

that the kinds of inquiry and discovery strategies advocated in the new curriculum (and long advocated in the Social Studies literature generally) which call for student involvement and activity, of open-ended problem-posing approaches, have not yet been adapted in all classrooms in any sufficient way (p. 142).

The lack of relevant and adequate supplementary materials can be factored into this problem. When a principal says that "it's fine to do research", this is likely to mean that in his situation he has modified the intents of the curriculum and, hence, may still be pursuing traditional methods in the classroom. The Manitoba Study (Lee, 1985), found this practice to be widespread, but most principals and teachers questioned in this study indicated that they were practicing the holistic philosophy.

The more detailed questioning of some teachers of their actual classroom practices strongly suggested that they may be practicing what they have said they had been

doing. Perhaps in this division the newer philosophy may have been more widely utilized than in other places. This appears to be consistent with principals' and teachers' statements about the rationale for change already discussed. However, it is also certain that the lack of support materials impacted upon instructional methodology as upon implementation through the modification of instructional strategies.

Another principal, who had spent a great deal of time closely examining one or two units in the Grades 5 and 6 Social Studies guides, found the support material suggested in the guides was above grade level and was not easily available. The principal stated that the support materials in the Social Studies curriculum were still a major problem for him. He commented,

For the Grades 5 and 6, we don't have much that a child 9 or 10 years old can read and understand. It's fine to do research but it's difficult for kids at that age level. And that's a real concern.

In this school, the teacher interviewed agreed with her principal that some materials, as suggested in the Social Studies curriculum were above grade level. The difficulty with the Language Arts curriculum was the lack of explicitness, as perceived by some principals and teachers and has already been mentioned. On the whole, apart from some of the problems already discussed, these guides were

found to be quite helpful as instructional materials.

Principals of all the schools, as well as the teachers, thought that there were in Canada a vast array of materials that were available for all the curricula. However, while principals and staff were aware of these resources, the problem that they all faced in this division was paramount. All unanimously agreed that budgetary constraints were the single most serious problem facing them in their efforts to acquire materials. Acquiring the resources to carry out the implementation was not an easy task. One principal stated that "resources are seldom adequate and that the first problem in implementation is the lack or perceived lack of adequate materials".

Certainly, many of the older materials were usable and were utilized in the classroom with the new teaching strategies. One principal concurred with a teacher who stated that with the new philosophy one can use a variety of materials ... "anything basically". Certainly, these people were beginning to look at curriculum from a more holistic and integrative perspective. Where the curriculum was restructured, it was not too difficult to utilize the older resources, and this was very much done in some aspect of the Social Studies and the Language Arts. Where brand new content was added, the problem of

securing adequate resources was indeed serious. A number of principals flatly stated that materials are expensive, for example, \$70.00 for a single filmstrip on a topic. The Manitoba Studies, (Lee, 1985; Lee and Wong, 1985a,b) noted that "material acquisition, including supplementary materials and the cost of these were particularly problematic". Mention of this problem was made in the literature review section. It appears that this situation will continue for some years until enough materials have been purchased to meet the needs of both teachers and pupils. Indeed, one or two principals suggested that with gradual acquisition of resources over the years, the problem of material will eventually be overcome but that supplementary materials may still continue to pose some difficulty.

One principal thought that some of the new materials he had seen were relatively good and easy to work with, but the publishing houses have not kept pace with the curricula (a view shared by a few others), so that to get adequate materials he had "to get a lot out of which you only use a little". This principal, as well as some others, noted that, "in a small school, budget tends to play a certain role, larger role than it should". He further commented,

It is very well to talk about new curricula

and new approaches and so on, and if you don't have a way to obtain those (materials) then it does become difficult ...; it's a dog chasing its tail type of situation.

This principal felt that some aspects of the new curricula "tend to develop somewhat in isolation in terms of the kinds of materials that are needed".

The effect of such a problem in this school, as in others, was a modification of the implementation strategy. This subject, like one of his colleagues mentioned above, "put things aside ... and says all right we'll sit on these and then try another year".

The change over to the holistic philosophy in the Language Arts and other curricula areas changed the strategy of material acquisition by schools and consequently, put a greater strain on the limited budget of all the schools. Previously a classroom set of basal readers was purchased for the Language Arts or the Social Studies for that matter, and this was easily covered with the textbook allowance.

With the new change and development of themes as an instructional strategy, a wider variety of materials "that may cost money were now indeed needed". "And", lamented one principal, "it's difficult to get books because there just isn't money available; we're short in that area ...; we're struggling".

The new approach to instruction in the Language Arts

meant that instead of one classroom set of basal readers, now five or six different sets, with about six books per set were purchased to meet the varying needs of the different pupils in the class. Other support materials for making books, writing books, binding books or book-making machines were required. The textbook allotment was unable to meet the requirement for materials. This posed a serious problem for all principals, as well as their teachers. This put additional strain on textbook, as well as instructional budgets. All schools in this study embarked upon fund raising projects to supplement their budgets. Raised revenues varied from the more affluent suburbs to the poorer sections of town. In many instances, these funds raised varied from about half the total school budgets that were allocated by the division, to a very small fraction depending on the location of the schools. A few principals lamented that this was not the best way to go about implementing a curriculum though it did have the tendency to involve the parents to a certain extent. Three principals supplemented their materials budget: one, by securing a Small School's grant and the other two by acquiring a minority education grant.

In addition to school purchases, many principals thought that the community was a good source of material that could be utilized in the new curricula. In this

aspect the Federal Agricultural agencies and other provincial agencies and voluntary organizations were helpful with booklets, leaflets, maps, and charts. One principal noted that materials seemed to be readily available for the new health curriculum. Mention was made of the Drug and Alcohol Foundation. Materials provided by this organization were "easy to read for the kids and developmentally appropriate", commented this principal.

Another source of materials for the English Language Arts was the publishing houses. At the time of the interview, three schools were piloting Language Arts programs developed in accordance with the holistic philosophy. The principals were able to get the publishers to provide the materials, at reduced cost, for the school where these programs were piloted. The money saved from having to purchase these materials was utilized in the acquisition of supplementary support materials. "The teachers are pleased," said one principal. "It's been good for us," said another.

Many teachers and principals were not able to secure support materials when requested from the Department of Education main library and media centre in Winnipeg. They recognized the large numbers of requests made upon this source from all over the province. Some principals thought that a media centre should be established in the

region in order to provide support materials for all the curricula areas.

Among the principals, one felt that the materials did not pose a major problem. He felt that the new philosophy of the curriculum placed emphasis on things that were fairly easily attainable. He further noted that the curriculum was written in part by teachers who were aware of the difficulty of getting expensive materials. For example, this principal suggested that there were many inexpensive materials available for the new Art curriculum but that time was a major negative factor. He commented, "In many cases that's where we break down. I think that we don't have the time to go and round up all these." In this division about half of the principals taught half-time. The problem of "rounding up" these materials became more difficult for these teaching principals.

All principals and teachers generally felt that the new materials that were available or being developed were reflective of the new holistic philosophy of the new curriculum. One teacher pointed out that some of these materials and books were "more relevant, written through a child's eye rather than an adult's". Again time was a critical factor in accessing these materials. More than half of the principals also felt that some materials were

still too structured and teacher oriented. One principal stated that some publishers were merely repackaging older materials in a glossier fashion. Another principal, already mentioned above, thought that as teachers were involved in developing the new curricula, they realized the difficulty of getting expensive materials and hence placed "emphasis on things that are fairly easily attainable". This opinion was not shared by all principals and teachers and merely reflects the fact that individuals develop different meanings and viewpoints in relation to their own situational knowledge as they go about implementing the curricula.

The experiences of those piloting the demonstration Language Arts programs provided by the publishers, indicated that concrete classroom demonstration type materials that were grade specific or thematic oriented were preferred by implementors when new curricula were to be implemented.

The provision of such materials that were classroom tested lessened the time needed to acquire such materials, which also had a high level of focus, specificity or explicitness with regard to the theme or topic that was covered. The material was viewed as being practical and relevant to the instructional situation, had meaning and, thus, was able to facilitate change in practice.

Summary

The lack or availability of material was found to hinder or facilitate implementation. The curriculum guides were viewed to be helpful though some problems were experienced in the Social Studies and in the Language Arts curriculum. It was felt that there were lots of materials available, but some principals and teachers also felt that there were inadequacies and that publishers had not kept up to date.

The study by Lee and Wong (1985b) found that only 60% of Social Studies teachers had access to approved text materials. Access to support materials was much lower - 48%. In this study, textual material was not a problem, but supplementary materials indeed were. More than 50% of principals in this study indicated problems in securing relevant supplementary materials. The problem of cost was critical as the new curricula called for a different strategy of acquiring materials. The new strategy was expensive, but necessary. Time was also a major factor as about half the principals also taught and, consequently, could not devote the time required to evaluate and secure materials. This task was often delegated to the teachers. Old materials were used and community sources were also helpful. Piloted materials provided by publishers alleviated some of the principals' problems of finding

materials. These materials were more focused and, therefore, quite helpful. Principals modified their strategies of implementation, and delayed or even abandoned some topics in response to the availability of materials.

Finally, it may be noted that principals and teachers suggested the establishment of a regional resource centre to facilitate the acquisition of materials for classroom instruction. The final report of Manitoba Social Studies Assessment Program, 1984, suggested the "identification, development and purchase of suitable resources to support implementation". This recommendation was found to be valid in this study as well.

Pilot Programs

The development of new curricula and the adoption of the final document are often preceded by the piloting of units and the subsequent modification of these units on the basis of feedback. The implementation literature is not definitive about the role that piloting plays in the adoption of new programs. This has been the case where piloting programs were ill-conceived and not widely disseminated. "Observability", in the theoretical literature, has been found to be positively correlated where the results of piloting have been adequately disseminated to classroom practitioners.

The perceptions on the effects of piloting in this division have been mixed. Six schools did not pilot any of the new curricula. The principals of these schools said that they and their staff were aware of and had access to these provincially piloted programs. One principal evaluated the experience as very good. The others thought that the pilot programs provided information but did not elaborate to as their effects upon implementation practices. One teacher felt that the pilot program she visited provided the opportunity to evaluate "extra materials" she normally "wouldn't have been exposed or have access to". She also felt that in a sense "We're all sort of participating in a form of a pilot program in that we're all trying to implement the new curriculum the way it should be implemented".

Four schools in the study were involved in piloting some aspect of provincial programs. One school had piloted as many as six programs one of which was rejected and completely revised. They found many aspects of the program to be too difficult for the suggested level and, hence, could not be implemented.

One of the teachers who had piloted the Computer Awareness K-3 program described the experience as "heavy" and "extremely valuable" with a great deal of work and a great deal of running around the province. She

acknowledged her principal to be involved, helpful, facilitative and supportive. The piloting of this program was thought to be "quite effective". It was a new area of instruction in the school, incorporating skills (new skills) and training and numerous adjustments and adaptations to a building not designed for the new technology. The effect was to lessen the fears of other teachers not familiar with this technology, thus making them more receptive to the curriculum, getting them involved in implementation practices in the use of computers both for learning and recreation.

In two instances principals had actually piloted programs. They described the effects of these to be very helpful. Another principal, who had a pilot program in his school, felt that the effects were very limited and that while "some division people benefit" the grass roots did not. He thought that "people have to go through the process before they are able to do anything with that" (meaning the pilot programs). The question about the primacy of personal contact has been recognized in the literature. Quick, one-day observations have not been found to be effective as personal hands-on experience with concrete demonstrable materials.

Three schools, two that had not piloted and one that had piloted the new programs were at the time of the

interview involved in piloting new English Language Arts programs that were developed by three different publishers. These programs incorporated the holistic philosophy as a major focus. One school had piloted in Grades 1, 2 and 3 and the principal was in the process of evaluating this program with the publishers. His teachers were pleased so far and were going to pilot the series in Grade 4 in the following year (1986-1987). Another principal had completed piloting another holistic Language Arts program in the Grades, 1 and 2 and had made the decision to pilot the Grade 3 program in the following year (1986-1987). This principal said that the program had been very good for them. The other program piloted in the Grades 1 and 2 by the third school was largely on the initiative of the two primary teachers. This program was adopted by some other schools in the division.

While these latter three schools did not pilot the provincial guides as such, the programs they piloted incorporated the holistic philosophy suggested in the new Language Arts curriculum. And, if the reader were to recall one of the principal's statement about the Language Arts guide as being more a philosophy of a document rather than a guide, the reader can, in fact, conclude that these schools were piloting the new curriculum.

The effects of the latter three programs appear to have been positive. Both principals and teachers who had used these programs were pleased with them. The subsidized lowered cost of these programs, including the materials provided by the publishers, in no little way facilitated the continuation of these programs. The curriculum was being implemented with the aid of the publishers and the principals were quick to seize the opportunity provided by publishers to carry out their mandate.

Summary

The effects of the piloting of the provincial programs appear to have had some demonstration effects according to the principals and teachers. It was difficult, however, to measure the extent of such effects. Observability as a factor aided the curriculum implementation process but not to the extent expected. The results appear mixed. How did principals go about facilitating such observations or getting the teachers actually involved with firsthand experience? How did these efforts facilitate implementation? Six schools had primary firsthand contact with piloting programs. All principals were involved in facilitating observations for themselves and their teachers. If one examines the question of student effects, somewhat touched, though

tangentially, then it can be stated that the principals' efforts did facilitate implementation practices. As this study mainly looked at implementation processes, it is not possible to make any definitive statement as to the degree of such implementation. But from what has been said and observed, this researcher can say, with some measure of assurance, that principals are facilitating and teachers are implementing the new curricula. Lee and Wong (1985b) reported that only 1% of elementary Social Studies teachers were not implementing, 22% had limited implementation, 33% had moderate implementation, 24% had implementation as a major focus and 20% as complete focus. In this study, all schools were implementing the new curricula and principals were involved through varying degrees in piloting as well as the final implementation.

Innovation: What is Really New?

New or Revised Curricula

Curricular characteristics, or attributes as indicated in the implementation literature, have been found to be positively correlated with implementation practices. The more an innovative curriculum is perceived to be superior or has advantages not observed in the old curricula, the greater the prospects for adoption and

implementation. Conversely, where these characteristics are not immediately apparent or are incongruent with current practices, implementation is hindered. It is obviously the change facilitator, qua principal's task, in the same building to make the implementors aware of these advantages in the curriculum. It has been suggested in the theoretical literature that such awareness leads to better implementation.

In this study, all principals and most teachers were aware that the new curricula differed and offered many advantages over the old. However, not all the teachers were in agreement on this issue. As has been indicated already, there were some teachers who did not perceive all the new curricula as being that advantageous. These teachers did perceive that there were differences in these curricula, particularly in the Language Arts.

While differences and advantages of the new curricula over the old were recognized, principals' perceptions varied as to the degree of such differences and advantages over the different curricula. All principals strongly felt that the new Language Arts curriculum was vastly different from the old. Most principals felt that the content of the Language Arts and even the Social Studies curriculum were really not that different. The comment by a principal about the content of the Language

Arts not really being new in the sense of newness, but a different way of looking at the content is recalled at this juncture.

"A noun is still a noun", as one respondent noted, but Dick and Jane and Spot (characters in the old readers) are no longer used as previously. In place, students use known characters in their short exercises and stories that are relevant to actual events or stories. What is widely accepted as being different in the Language Arts is the methodology of instruction. All subjects agreed that there was a major methodological change. One can even say a paradigmatic shift in methodology was now observed. One principal characterized the differences as being "really fundamental". Such descriptions as "more process oriented rather than content", "more youngster oriented", "more student involvement", and "more humanistic", express the general sentiment. Table 4 summarizes the differences or advantages perceived by principals.

Table 4

Summary of Principals' Perceptions of Major Differences
Between Old and New Curricula

- 1) The program is more related to kids today. We were pretty hung up on facts ... very traditional ... regurgitating them (facts) on tests. Now they can do research ... write with some purpose in a more meaningful way.

It is less factual oriented, more concept development and more interesting. The trend now is away from basal readers and guide books that were highly structured. You can do a lot more in the development of themes.

The basic difference is that it is developing in kids more of a process approach to things rather than learning facts.

- 2) There is a methodological change in the Language Arts. It is more humanistic. In comparison with the Health, Computer Studies, Mathematics Curriculum and Science Curriculum, the Language Arts scope isn't defined as well as it is in the more traditional curriculum. The Language Arts is less of a guide, more of a document of philosophy of approaches. It takes a lot more direction and understanding by teachers than any other curriculum. It has changed from factual teacher centered to more of a mix between teacher and child centered.
- 3) The old curriculum had tedious exercises, workbook exercises. The new curriculum is more demanding, but more profitable for students, more creative writing, more speaking, listening. These were badly neglected in the old curriculum. A much higher level of interest on the part of the content of the program is now observed. The Social Studies are less of factual and more of an interrelationship with people.
- 4) More change in emphasis, more relevant for pupils; higher level of interest, more to the way people live rather than memorizing facts, details and so on. More of a practical kind of program. A different philosophy, a different approach.
- 5) More process - less content. Language Arts is quite a change in the whole language approach, away from phonics. A complete de-emphasis on spelling in the initial stages.
- 6) More student involvement and having them do more writing and more oral activities. Less on the mechanics of writing - more student oriented.
- 7) New curricula do not only state what the end product will be, but suggests stages kids will

go through and activities they will learn. More of the totality in the new curriculum - more so than with the old curriculum. We are teaching children the skill of being able to create, being able to manipulate materials such as crayons and paints and so on. But the emphasis is different. It's more process than content ... type of thing which is related totally more so than with the old curriculum. A more holistic aspect of learning.

- 8) Old curriculum - too skill oriented program, like a recipe book, like a menu - too prescriptive, too content oriented.

Now the teacher is a curriculum builder. More child centered in approach, more relevant, more flexible.

Children with varying degrees of entering behaviors could be more easily accommodated. It's more guiding, which is what it should be.

- 9) There are some really fundamental differences in the teaching of Language Arts using the whole language approach (a whole new philosophy) rather than just a phonetic kind of base program. There is more reading and writing required and the style of teaching reading and writing (has changed). The old curriculum was very structured. There is more content (i.e. new topics) in the Social Studies.

- 10) New curriculum - more youngster oriented. Focus (now) is on children doing more for themselves than (in) the old curriculum and that's where I see the major difference. A lot more emphasis on the learning process. The old curriculum tended to tell the teacher this is the kind of thing you can do; this is the material you can present.

The new curricula tend to say, here are the kinds of things you can get the kids to do. And so I think that's very much an improvement. I like that very much.

As mentioned above, the perceptions on the differences or advantages varied over the curricula. One principal did not feel that the Physical Education

Curriculum was that different but merely represented a "restructuring of the activities to make it easier for the classroom teachers to teach, in light of the fact that many schools did not have proper facilities or a physical education specialist".

Another principal said that he "didn't see a tremendous change in the Health Curriculum," and yet another had similar sentiments about the Art Curriculum. With new materials being added to the Social Studies, it was felt that there were major changes in both content and methodology of instruction. Much of the older content has remained, but with a different methodological focus (some of which has been mentioned already in a previous section).

The introduction of the Computer Awareness Curriculum was felt to be a dramatic change. While there were innate feelings that technological changes in society necessitated the development of an awareness in children of such changes, many teachers, and indeed, some principals initially felt uncomfortable, even suggestive of some slight passive resistance on the part of teachers when this change was brought about, or as indicated by one principal mandated from above. The need for this change was universally recognized, but the initial resistance is explained by the fact that this was a brand new

curriculum where teachers for the most part, and some principals did not have previous training nor experience in handling this activity. One principal rationalized the change to his teachers by comparing it with the introduction of the calculators of the yesteryear. But while the calculators were easily available and manageable, the computer presented a different problem which was somewhat terrifying. Principals helped teachers conceptualize the rationale and advantages of this change, and as a result, teachers were able to comprehend their initial fears; they then undertook the implementation of this curriculum with greater enthusiasm. Many staff took training courses at their own expense at the university and elsewhere in order to get a firmer grip on this curriculum.

Principals' perceptions of differences and advantages of the new curricula are remarkably similar, particularly for those subject areas that are most frequently taught. Among the new curricula, the Language Arts and Social Studies dominate the curriculum and so these two curricula were more closely examined by principals and more frequently commented upon.

Because of the introduction of many new curricula, almost all at the same time, principals and indeed teachers felt burdened and overloaded. Consequently, they prioritized these curricula in terms of their perception of

the importance of the new curricula. Those curricula that were perceived to be of lesser importance were not entirely neglected, though some came close to this point, but were often relegated to a lesser position to be implemented as teachers saw fit. However, one principal commented, "You have to be very careful not to forget about some subjects while looking at the others".

The concept of complexity identified in the literature is indeed relevant to this situation. Structural complexity in the new curriculum appears to have hindered the detailed examination of all new curricula and their subsequent implementation. Too many curricula, spanning too many grades simply overwhelmed both principal and teacher. Berman and McLaughlin (1976) identified this problem in their study. Fullan (1982) made mention of this as well. The Manitoba Education Studies (Lee, 1985; Lee and Wong, 1985a,b) also noted this problem. The next chapter will take a closer look at how principals attempted to resolve this problem.

Another problem that faced all principals stemmed from the major difference in instructional methodology, particularly in the Language Arts. As mentioned before, not all teachers readily accepted the new holistic philosophy and its attendant methodology. Even one or two principals, though accepting the general intents of the

philosophy, were at the time of the interviews, still somewhat skeptical of some aspects of the methodology as translated into practice.

There were some aspects of the new curricula that were still unclear to many of these principals and teachers. Hence, as noted below, there were initial hesitancy by some of plunging headlong into the new methodological approaches. Gross et al., (1971), Fullan and Pomfret, (1977), Fullan, (1982) have conceptualized this problem as one of "clarity". The Language Arts curriculum certainly displayed that clarity was a problem inhibiting implementation by both principal and teacher.

The principals, indeed, had a difficult task in educating their staffs about this problem. Teachers interviewed were certainly cognizant of the philosophy, and most agreed with it or were somewhat attuned to the new philosophy. Two teachers mentioned that they were still instructing grammar in the old way. One principal saw three types of teachers: those who had made the complete change, and were instructing according to the new philosophy; those who were partially using the change in combination with the old methods; and, those who were using the old method. This principal believed that traversing the middle road in the first few years was the best approach. What emerged from the interviews, from

those teachers questioned, was that there were quite a number of teachers among both the more experienced and even the newer staff, who were having difficulties conceptualizing and using the new holistic, integrative philosophy. Fullan (1982) recognized this aspect of complexity as a "treatment" factor. This factor certainly hampered the implementation efforts. Principals went about this problem by allowing the old practices to continue while incrementally introducing the new changes.

Another aspect of complexity, dealing with differences or similarities in the new curricula, is the concept of "integration". This concept appeared to be a major theme in the new curricula and a major methodological thrust as well. Perhaps it is allied to treatment but did not seem to present any problem for any of the principals or teachers interviewed. As a matter of fact, both principals and teachers were delighted with this aspect of the curriculum and were implementing with this factor in mind. In fact, it was suggested by principals and teachers that the integrative method facilitated the delivery of the entire curriculum of the school. The theoretical literature is known to be supportive of the underlying theory. Teachers, noticeably one of whom was still not fully convinced of the holistic philosophy, said that they had been integrating their

lessons previously, and that it was not really new or different, but rather an encouraging affirmation of a practice already very much established.

Perhaps an examination of some aspects of the curricular differences would lend further insight on not only how principals perceived the curriculum, but also how they were able to translate their perceptions into actual practice, thus facilitating implementation as intended.

All principals agreed that the new curricula were quite flexible and consequently amenable, not only to individual teacher expertise and interests, but also to students' needs as well. A few principals, on more detailed questioning, explored the advantages of this flexibility in a manner that gave further insights into their thoughts, feelings and intents as to curriculum.

Whereas hitherto the curriculum was thought to be too prescriptive, too content oriented, too "hung up on facts", too linear, all determinant of traditionalism, now it was thought to be too open, flexible, even malleable. "Now", states one principal, "the teacher is a curriculum builder designing his own units of study that have meaning". One principal speaking of the old curriculum, stated that he

noticed that in what the teachers were doing was very traditional. (They) took the Social Studies text book and followed it through,

asking kids be responsible for familiarization of facts and regurgitating them on tests. Now they (pupils) can do research in the Social Studies; they can write with some purpose in a much more meaningful way. There is a great carry over ... and it's more interesting.

Another principal said "It's more guiding, which is what it should be; it's more Child Centered in approach, more relevant".

What these principals are in fact saying, is that they recognize in the new curriculum advantages that were not readily apparent or simply not there in the old curriculum. One of the major differences is that the new curriculum moves away from the linear approach. Teachers, as well, emphasized that the curriculum provided for multiple points of entries for heterogeneous groups. This was felt to be advantageous particularly where "mainstreaming" is becoming increasingly more and more an everyday factor. Children with varying degrees of entering behaviors can be more easily accommodated in the classroom by the same teacher in the same subject area. One teacher commented that she had not had so much fun in teaching as she had now. This statement appears to be based on the freedom she now has in utilizing a flexible curriculum to intergrate the different subject areas and teaching to meet different needs and interests, and also, in the fun of learning which she has observed in her pupils. This sentiment was shared by all teachers though

not with the same intensity as expressed by this teacher.

The general perception among principals and teachers was that the curriculum in being more flexible is now easily "unpacked". It could be spread out as mentioned above and accommodate varying degrees of entering behaviors. (See for example, principals 8, and 10, statements in Table 4, the last three sentences or so). In the area of speaking, reading and writing, both in the Language Arts and Social Studies and even in Art, the above type of observations were made by principals and teachers.

The idea of "unpacking" the curriculum to meet varying abilities within a classroom seemed to be congruent with the intents of the curriculum. What is not quite sure from this research was the extent of this practice in the division. From some of the observations made so far, it is reasonable to assume that this concept was not practised throughout the division in schools by all principals and teachers, but may be concentrated in pockets. Principals' statements in Table 4 suggested that principals are inclined towards a more flexible easily "unpacked" curriculum. As principals and teachers go about the process of comprehending the curriculum and implementing same, it is also reasonable to assume that the utilization of the concept of "unpacking" will have a

wider impact upon classroom practice.

Curriculum Overlap and Omissions

It was mentioned above, principals and teachers did not think that all the content in the new curricula had changed. Principals were unanimous in their agreement that there was a great deal of overlap between the old and new curricula. One principal stated quite emphatically that there has to be some overlap. Most felt that "everything that was good in the old is still in the new", and that "they just haven't thrown away everything." Even in the Language Arts, principals felt that the old materials could be used but from a different vantage point. One principal commented that there was "very little difference in terms of content, just that we do it in a different way". With regard to the question on omission in the curricula, principals' responses varied somewhat. Some principals felt that if there were omissions these were more apparent than real. For example, one principal felt that even in grammar there weren't any omissions, that it was up to the teachers to pick it up.

Three principals felt that there were omissions in the Language Arts curriculum, particularly grammar. One principal questioned,

When does one implement grammar, Grade 5, Grade 6? When do you actually start telling the students about grammar? It has been left out now to a large extent and supposedly they will pick it up in reading.

Another principal expressed a similar sentiment about grammar.

There should be something (in the Language Arts) to go back to the basic grammar for those kinds of kids that don't pick up as well as the others using this approach. And this is where I think possibly that curriculum hasn't addressed the different learning abilities of kids.

Yet another principal felt that some deficiencies existed in the Language Arts curriculum; "somewhere along the line I have a notion that people must go back to learn to spell, punctuate and do these things". One principal, whose perceptions fitted somewhere in the middle spectrum, felt that the omissions were "things that teachers are not getting out of the guides, concrete definite structure in grammar". He thought, "that's in the curriculum but it's spread out very thinly ...; it's passed over fairly innocently by teachers". Speaking about the Science curriculum which, as noted before, was already implemented when this study was done, this principal felt that this curriculum "failed to retain enough nature study ... not enough about birds, plants, animals and their habitat". (Currently, the Science curriculum is being revised for implementation

anticipated in 1990-1991).

What accounted for the variations in these perceptions about the omissions in grammar? On the one hand, three principals felt that there were real omissions in grammar in the Language Arts curriculum. On the other hand, about half the principals did not see omissions in grammar, but rather thought that it was inclusive in the very nature of the activities themselves. This question appeared to be one of concern and a problem with some principals and teachers. Opinions among the teachers were found to be similar to those of the principals. Some teachers felt that grammar was not excluded, but subsumed in the curriculum. Others felt that it was unclear and appeared to have been neglected, if not excluded. The problem here seem to be one of "clarity", one of those curricula factors that has been identified in the research literature. Subsequent discussions with the Language Arts Curriculum Coordinator in the division revealed that indeed this appeared to be a problem with some implementors, but that they were attempting to resolve this issue through further consultations with school personnel.

Perhaps part of the problem lay in the value systems of both principals and teachers, the way they viewed curriculum. Three principals, who appeared to have a

deeper insight into the curriculum, did not feel that there were omissions of grammar in the Language Arts curriculum, but that it was the teacher's responsibility to identify where the needs were and when they should be taught.

Some teachers said that they taught the grammar in the traditional way while others said that they were using the new holistic method in their teaching of grammar. The impression this researcher received from this study, was that there was a larger number of teachers who were still using the traditional methods in teaching grammar but using the holistic method for the rest of the Language Arts instruction. Principals did not appear opposed to this strategy; in fact, most allowed the practice while hoping for a faster transition to the newer suggested methodologies as time progressed. Principals were aware that the methodological change in the Language Arts would not be accomplished overnight, hence, their decision to move slowly.

Rather than omissions, some principals thought that some aspects of the new curriculum, particularly the new Social Studies, were quite detailed, and this was viewed as a problem by two principals. In fact both these principals observed that some of the detailed units in the Social Studies were actually bogging down the

teachers and feared that in the rush to complete the curriculum there was the danger of reverting to a mode of instruction, reminiscent of the old strategies that would defeat the intents of the new curriculum. In other words, not the full implementation but rather some form of adaptation would result. At the time of the interview, one principal was in the process of discussing this problem with his staff and making suggestions as to the resolution of this problem in the curriculum implementation process.

Summary

How then did curricula differences, overlap, and omissions affect curriculum implementation? It was found in this section that differences were real, actual or perceived by those who were implementing new curricula over old ones. There was a major fundamental difference in methodology in the new English Language Arts curriculum with carryover implications in the other curricula areas. Where these differences were attuned or were congruent with values of the implementors, implementation was facilitated. Where these differences were at variance with implementors' values, implementation was hindered. Where values were incompatible with those subsumed in the new curricula, the principals' tasks were

perceived to be more difficult and urgent if they wanted implementation to proceed as suggested by the developers.

Differences between old and the new curricula were viewed from about six main perspectives:

- 1) Some of the new curricula were viewed to be merely a restructuring of activities to facilitate instruction and, therefore, not that different.
- 2) New content was added in the Social Studies, Health Curriculum and a new curriculum, Computer Awareness, was introduced.
- 3) Much of the content and materials of the old curricula that were useful had remained in the new but were utilized in a different way, reflecting the new philosophy and attendant methodology.
- 4) There was a major fundamental change in methodology in the Language Arts with carryover implications in the other curricula areas.
- 5) The new curricula were viewed as being more open and more flexible than the old.
- 6) Some aspects of the new curricula were too detailed.

Principals and teachers showed remarkable unanimity in their delineation of curricula differences and overlap. Such congruency of perceptions appears to have resulted from close interaction between principals and teachers in the school environment. Some principals and

teachers felt that the major omission in the new English Language Arts curriculum was in the area of grammar. Other principals and teachers did not share this point of view but rather felt that the apparent omission was subsumed in the curricula. This researcher felt that this problem was structural - one of clarity. Lack of clarity led to variations and modifications of the suggested holistic methodology. In short, curricula adaptation as a form of implementation was taking place simultaneously with implementation. This observation is consistent with what has been observed in the research literature.

Chapter Summary

The literature on innovation and change suggest that the identification of the need and rationale for change is a necessary step in the implementation of any innovation. In this study all principals and most teachers saw the need for changing the curricula and believed that the change was warranted. Principals, however, varied in the number of rationales they offered for the change. Principals who were more deeply involved in the curriculum implementation process offered more rationales.

A few principals appeared to have some difficulty in accommodating the changes that represented a new paradigm, a new way of thinking. Principals devised

different strategies in order to develop a clearer conception of the rationale for change and to convince their staffs that the change was indeed warranted. One such strategy involved informal group sessions where staffs gathered to examine the philosophy and rationale behind the curriculum.

Principals also varied in their perceptions of curriculum. Some felt that the curriculum should be flexible and amendable through critical analytic reflections; others felt that the curriculum should be implemented as designed by developers. All felt that the curriculum should serve the needs and interests of pupils and that the new curricula were much better than the old as the new offered benefits not provided for in the old curricula. It was felt that where the rationales for change were not clearly perceived, a more "surface" implementation would result. Some principals who appeared to have fully grasped and conceptualized the rationales for change seemed to have been involved in much deeper implementation of the curricula. Data supporting this assumption was provided.

About half the schools in this study were involved in piloting the innovative curricula. The effect of such piloting (the concept of observability) appeared to be mixed. Some principals felt that the piloting was helpful

while others felt that the effects were limited to those who were actually involved, as hands-on experiences are needed if staffs are to derive full benefit. Some principals made effective use of publishers' programs and piloted these, thus providing their staff with the type of experiences suggested in the new curricula. All principals provided opportunities for their staffs to make visitations where programs were piloted in the division and elsewhere.

It was found in the study that differences and overlap between the old and new curricula and omissions in the new, were real or perceived to exist by the principals and teachers. A major fundamental difference in philosophy and methodology was recognized by all implementors, for example, in the area of the English Language Arts where it was most explicit. Where these changes were in congruence with what principals' perceptions about curriculum were, implementation appeared to be facilitated; where these differences were at variance with implementors' values and beliefs, the principals' tasks were perceived to be more difficult in the implementation process.

Principals and teachers showed much agreement in their delineation of curricula differences and overlap. Disagreements, however, existed among principals and even

among the instructional staff; for example, some principals felt very strongly that the major omission in the Language Arts was in the area of grammar. Others did not share this viewpoint. The problem of clarity led to variations and modifications of the suggested holistic methodology. Curriculum adaptation as a form of implementation was also taking place alongside surface implementation and deep implementation. These observations are consistent with what has been observed in the research literature.

CHAPTER SIX

PRESENTATION AND ANALYSIS OF DATA - PART TWO

This chapter presents and analyzes the data in the last two clusters of understandings according to the following organization.

Implications: What Aspects of Current Practice are Affected?

Divisional Structure for Curriculum Implementation
Summary

Professional Development of Principals.

Divisional Orientation Inservices for Principals.
The Curriculum Guides as a Source of Professional
Development.

Professional Reading and Other Professional
Activities.

Summary.

Professional Development of Teachers.

Principals Involvement in the Professional
Development of Teachers.

Divisional/Departmental Inservices.

The Curriculum Guides.

Other Professional Development Activities.

Summary.

Principals and the Process of Implementation of
Innovative Curricula.

Instructional Leadership.

Summary.

Principals' Managerial and Instructional Behavior.

Curriculum Priorizing.

Planning, Decision Making Strategies.

Student - Staff Effects.

Articulation: How does the New Curricula Fit in with Other School Programs? (Curricula Congruency).

Chapter Summary.

Implications: What Aspects of Current Practices are Affected?

Divisional Structure for Curriculum Implementation

Examine for the moment the following statement by one of the principals. It concerns this principal's perception of the division structure with regard to curriculum implementation.

The division does not have a model; there is a strategy in place in the division. The division has a curriculum coordinator; it has a Language Arts coordinator so there is obviously in the division a thrust in that way and I appreciate that. They have developed a model of curriculum implementation in the division which we are all aware of. They have developed guidelines in that model and they have developed some timeframes within that model for the implementation of that particular curriculum. In terms of the school level I, we, try to build into that model I guess as much as we can, but then you are dealing with more real things. Now you have to do practical sorts of things, not the theoretic-

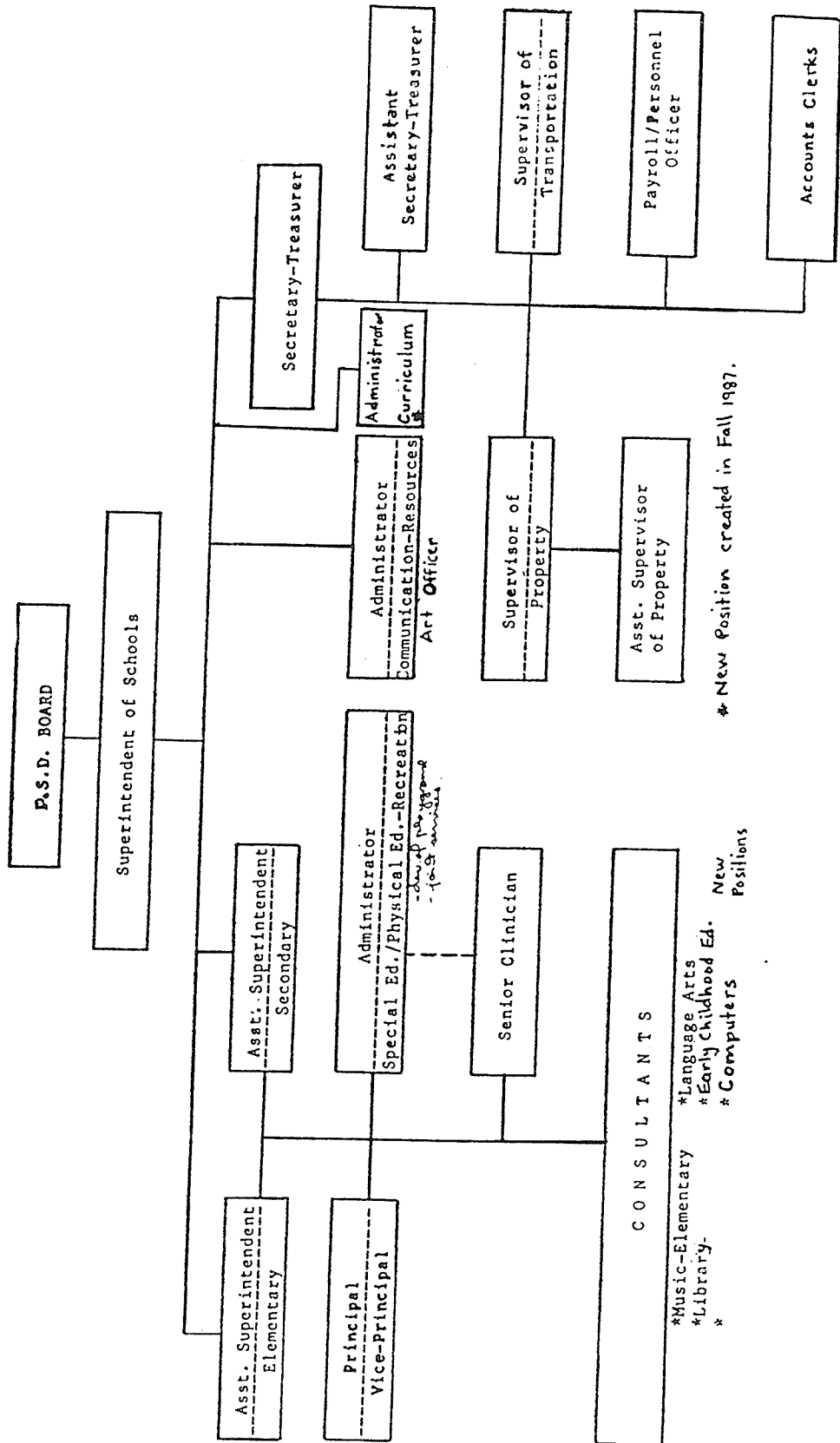
tical aspect of it. So then when it comes to practice you may use those goals that fit your particular location. So for your own school, my decision was that we would prioritize, and the Language Arts would be the one that we would do a lot of focusing on in terms of implementation. We have a fair bit of freedom in terms of the individual school. I have a lot of support from the central office in terms of curriculum implementation here in this particular school. When it comes to the money aspect, there may not be as much as I would like, but there is certainly support. I see the division putting more resource teachers because that is necessary with the new programs.

A number of factors about curriculum implementation emerge in this school division. The division has in place a model or a structure to facilitate the implementation process. This structure is superordinate. It is designed from the top. Ontologically, it assumes a realist perspective; it is a given; "They have developed guidelines in that model and they have developed some timeframes within that model for the implementation of that particular curriculum". Nevertheless, if one may suspend for the moment the notion of a reified concept, the structure does allow for a measure of flexibility -- "We have a fair bit of freedom in terms of the individual school". Blau (1955), after observing the functioning of organization structures, noted in his book The Dynamics of Bureaucracy, that higher levels of efficiency are obtained through the creation of conditions that favor adjustments in bureaucratic structures.

Weick (1976, 1982), in his conceptualization of schools as loosely coupled systems, observed that only key values are centralized, whereas lesser values are allowed to be modified at the local level. The division does allow individual schools a great measure of freedom in determining their own structures for implementing the curricula that have been prescribed. Not only that, the division has been providing "a lot of support from the central office in terms of curriculum implementation".

The support provided to principals and schools consists of financial support (though problematic) for resources, professional development, human resources and more recently, a reorganization of the central administrative structure (Figure 13) in order to become more responsive to the myriad of changes that have been taking place over the last decade or so but more particularly, over the very recent past. As noted by the principal mentioned above, "I see them (i.e. the division) putting more resource teachers (includes consultants etc.) because that's necessary with the program". It is also obvious from both a principal's and a teacher's comments that funding is "a problem". Nevertheless, the board has responded to the needs by appointing consultants. The following comment reflects how one teacher perceives the support provided by the

FIGURE 13. Administrative Structure: Prairie School Division



* New Position created in Fall 1987.

board and the difficulties facing the board viz. the allocation of funds.

I think the board tries very hard to provide funding, to keep up with the new trends and new philosophies and become aware of what's happening in the schools and to support whoever possible. Again, I think the finances are a problem. I think that when people make requests for, you know, support with the new curriculums, I'm sure it's very hard to be in the Board's position to know where to draw the line as far as finances are concerned. But I do think that they do make an attempt to free teachers to have P.D. time and to keep up with changing curriculums. But I'm sure when you're trying to keep costs down and there's constantly being new programs added that are taking extra funding and it may look as if they are not supporting and they're not keeping up, but they have a job to do as well. I do think that they do make an attempt to support.

In a preamble to the new divisional organizational structure, the changing nature of society and school curriculum were recognized and constituted the rationale for the administrative changes. New personnel at the divisional level were added in order to facilitate the changes. The following is the rationale or preamble to the changes.

Such developments within the Prairie School Division over the past decade as declining enrollments, the employment of staff specialists in certain areas, and changing program needs, have made it necessary for the administration to review the organizational structure and resulting support services of central office - a structure which has been in place since 1967.

Contingency theorists, notably Lawrence and Lorsch

(1967), have attempted to draw a relationship between organizations and their environments. These theorists have noted that effective organizations are those that are successful in adapting to environmental demands. Burns and Stalker (1961) essentially came up with the same conclusion in their study of British firms. They observed that successful firms adopted organizational structures that were consistent with environmental demands notably in changing market and technological conditions. While the analogy between the studies observed above and the school division may not be that close, (they are different organizations but they both face the problems of change) the fact remains that the school division has responded to changes in the environment and, consequently, modified its administrative structure in response to those changes. The addition of consultants and other personnel to its administrative structure reflect the changes and have obviously had a positive impact upon implementation.

Such changes, however, have not radically altered the administrative structure. An examination of Figure 13 shows that the new structure still reflects the typical top-down bureaucratic model of organizations. The principal is still the middle manager in the system that is a "given". The addition of such positions as

consultants, however, do indicate an organizational structure responding to identified needs. The literature on implementation has reported that adaptive organizational structures are necessary for the successful implementation of changes. Even though Figure 13 does not show it, there is considerable flexibility in the structure at the building level. This flexibility is stated by the principal's comment above (pp. 191-192).

An interesting observation that has emerged from the data is the nature of the assistance provided by the school division. While a structure exists for some curricula at the divisional level, it is absent for the other curricula areas. This factor was particularly noted by one teacher.

We have a Language Arts Consultant who sort of ties things together. He visits everybody's classroom and he knows what's going on and he does a lot of directing too. He can put groups of people together who he knows are doing the same kind of thing and he is really good at that. The other curricula it's kind of hard to say because nobody is really overseeing them.

Another teacher from another school made basically the same observation. She lauded the appointment, and work done by the Language Arts Coordinator but lamented that "division wide, it's different for each curriculum". She further suggested that there were two extremes in the implementation strategy of the division. At one end, the curriculum that was perceived to be the most important -

received favored treatment, and at the other end, the one that was viewed to be of lesser importance, received less treatment. The case of the Art curriculum is a good example of the latter type. This teacher commented:

We had one session from the people in the Department who came in and everybody in the elementary was involved in it. Then there was one later, I think that one was optional, but it was basically left up to the committee that went to Winnipeg for the training sessions to encourage the implementation and that was as far as the division sort of went. In this particular case, that committee didn't work, so very little was done. There has been a couple of things offered, but there hasn't been a very big push. In the computer stuff, the division really, really supported that The computer is the one that has gotten the and somebody placed their judgement there. The health has been done in a really good way. There was a committee that did the same sort of thing. They trained ... and the curriculum coordinator was quite involved in that, so that committee has done an excellent job ... the divisional model has really worked ... but the key is that there's always somebody that's heading that committee that has the time to do that.

One of the unique features of this school division is the committee system (mentioned above) for each new curricula. Principals and teachers are appointed to form a steering committee to facilitate implementation in the schools. Obviously, in the case of the art curriculum, this system does not appear to have been effective primarily due to a lack of leadership stemming from the little emphasis/priority given to that curriculum. A

principal described the committee system.

There are committees for each of the areas and those are the committees feeding out to the schools the relevant materials suggesting a time line for getting into it and adopting it making sure everybody is on the right track, holding inservices in the various areas. The curriculum committee has really been involved in supporting schools in implementing curriculum to the best of its ability. Several schools are on the committees. There are not necessarily representatives from every school but, there are committees in Social Studies, in Health, in Science, in Computer. So definitely, I see the Board as being supportive.

It would appear that consultants are appointed on the basis of some form of prioritization done by the division. What is the nature of this prioritization? How is it arrived at? Who makes those decisions? The English Language Arts is generally regarded as one of the most important curricular areas in the schools. The changes here have been the most dramatic and so the appointment of resource personnel for this area would generally be welcomed. It may not matter where locus of control was situated, as all schools and most personnel were in need of assistance. However, the appointment of a computer consultant, as well as the introduction of the computer program, was seen as emanating from above. It was thought that this priority was conceptualized at the central office. Indeed many people at the school level had seen the need for introducing computers into the school, but similarly, there were some who did not. The

fact of the matter here is that some sort of priorities were seen to be given to some curricula and not to others. This perception may have influenced principals and teachers in the manner in which they went about prioritizing curriculum implementation at the building level. It may be noted at this point that in 1987, the division appointed one of its principals (who participated in this study) as an administrator for curriculum development and implementation. One of his duties was to assist the implementation of all new curricula introduced into the schools in the division.

As indicated in Figure 13, other consultant positions have also been added to the divisional structure. The school division has been receiving feedback information from its principals and schools. This factor, combined with the massive amounts of new curricula going into the school simultaneously, led to changes in the organizational structure at the division level. Changes in the structure were partially the result of such feedback and partially the adoption of all the new curricula (personal communication with the Assistant Superintendent, Elementary, January, 22, 1988).

Leithwood, Cousins and Trider (Draft, January, 1988) have developed a model showing how such feedback loops operate during the implementation phase of new

curriculum. In their model Leithwood et al. noted that

the outcomes themselves, once directly experienced, are fed back to implementors as political, organizational and personal context factors have the potential for influencing ... further actions (p. 11).

Moreover, "the outcomes also have the potential for influencing, over time, the development and policy specifications themselves".

Findings from this study somewhat validates the theoretical model developed by Leithwood et al. The division also provided professional development for its principals prior to the introduction of new curricula into the schools. This issue will be discussed in more detail under the section titled Professional Staff Development of Principals. There is a structure operating in this division. The function of that structure is primarily to assist the principals and teachers in the implementation of new curricula going into the schools. But the system seems to be flawed in a number of respects. Some of these weaknesses have been identified by principals and teachers and the response has been policy changes and an adaptive organizational structure that is attempting to meet the identified needs of the system.

A major flaw in the structure deals with the appointment and perhaps training or direction given to

newly hired principals. When asked about an overall strategy for implementation in the division, one of the more recently appointed principals stated:

No one has told me of a division game plan; basically, I think when the new curriculum come out they try and get it into the schools as fast as they can. No one has said anything and I did hear at one Administrative Council meeting, the high school people talking about the same thing (i.e. implementation strategy) and sort of a mutual agreement among the high school people that for this curriculum they were going to have the emphasis this year over the other one ... and next year 'they' will do a job with the other one. Now that is poor management on the Department's part (i.e. Department of Education, not the division). ... I want to know about the curriculum like anybody else at the start So I'm expecting these things to be laid out to me and not in an hour and a half session with five other new curriculums. Focus on it (i.e. one curriculum) just as the division focused on the legal laws in the school, a day and a half kind of thing. And go through the units and say, that's important here; here are the resources, bring in the publishers; let them see the stuff and do it right. The Department through the Division should say, here is curriculum X and here is our game plan, not some of the things in the Manitoba Department about what they're saying. We hope it will be out in '86 or '87; it doesn't twiddle. But, if it says here is the plan, these people are working on it; these people are on the sub-committee; these people are piloting it here; the interim plan will be out here, and these areas will be I know somebody in Winnipeg has got this, but we never see this

The concerns of this principal clearly reflect a major shortcoming of the administrative structure. It has been identified that there are orientation sessions for

principals. A structure exists in order to facilitate such orientation for principals already within the system, but there are cracks in the system, and these cracks are obvious from the statements made above. This concern was shared somewhat by another principal who had recently returned to the principalship after an absence of a couple of years as a classroom teacher. This principal was not faulting the system, rather, he was complimenting it, but the weakness is obvious.

I missed a number of the sessions that have been put on by the school division for educators, principals and administrators. I think certainly, that was a step in the right direction. I feel short changed to a degree that I missed out on that, but it was my choice I was back as a classroom teacher for the last two years ... so I missed out on some of those sessions which some of the other administrators had. Now, we did a very strong and worthwhile session this Fall in Portage for a couple of days where the Board, principals, supervisors all met and talked about implementation of the curriculum in the division. Kind of look at all their goals and I think that that's important with the Board members too ... so, it's an attempt to meet the needs. It's demanding.

The crack in the structure was the apparent lack of procedure to deal with cases such as these. Three of the principals in this study were recently appointed with less than two years in the elementary principalship. Another principal had just returned to the position but had missed out on a number of planned activities that were made available to the principals when most of the

new curricula were being introduced into the schools. The principal who had returned from the classroom after a two year furlough from the principalship had over twenty-five years of experience as a principal. The latter principal had experience to fall back on, but this was not the case with the former group who relied more on their teachers to carry out the implementation. The latter principal, on his return, initially allowed his staff to carry on while he gained a feel for what was happening, but his long experience in the principalship also propelled him along and allowed him to take a more activist role in the curriculum implementation process.

Summary

It has been noted that with the introduction of numerous new curricula into the schools, the senior administration in the division took some measures to provide a structure; a framework in order to facilitate the implementation process. The structure provided guidelines, timeframes and allowed some flexibility for individual schools. Principals, through their organization were briefed; curriculum committees were set up; additional resources provided and consultative staff were appointed and attached to the central administration on the basis of feedback and on the fact that too many curricula that overwhelmed staff were being introduced

into the schools. Some weaknesses in the structure were observed. These weaknesses somewhat influenced the implementation process. The structure that was developed, however, was geared more towards an educative process that would facilitate implementation.

This educative process has been noted in the implementation and theoretical literature as an important factor contributing to successful implementation. The division has set the stage and has provided support to further the educative process and hence implementation. The next section will look at how principals operate within this educative process.

Professional Development of Principals

It was observed, in the review of the literature, that lack of certain skills and knowledge negatively affected the implementation of new curricula in the schools. Inversely, professional development that relates to the change efforts facilitates implementation. Rubin's comment cited in the literature review sums up the situation most cogently. Rubin (1987) observed that "it is virtually impossible to separate teacher and administrator capability from efforts to reform schooling" (p. 174).

Staff and professional development that relate directly to reform efforts have been recognized as

crucial variables that impact directly upon the level of implementation. This section and the following section on teachers will examine first, the professional development activities of the principals themselves; what they had to do and learn that facilitated their implementation efforts and, second, the professional development of the teachers that relate to their implementation of the new curricula.

In this school division under study, the professional development provided for principals so that they can expedite the curriculum implementation process has been summarized in Table 5. Fenstermacher and Berliner's (1985) staff development profile will be used to analyze the professional development of principals and teachers. The model consists of four main variables: origin, purpose, participation, and why participate. Analysis will be done with each of the variables independently, then altogether. These activities are measured against a continuum (Figure 14) to show how they were initiated, whether externally or internally.

Professional development activities have been initiated both internally and externally: externally, as has been observed under divisional structure above, by the central administration as one of their strategies for curriculum implementation and, internally by principals

Table 5

Principals' Professional Development Activities

- 1) Division and Department orientation inservices for principals.
- 2) Principals' conference i.e. regular Divisional Meeting.
- 3) Reading curriculum guides - at school - all did.
at home - most did.
- 4) Consultations -- with other principals
-- with own staff
-- Resource personnel
- 5) Visitations -- to other schools.
- 6) Professional Development Inservices for Staff and Principals.
- 7) Participation in professional organizations e.g. the I.R.A., C.E.L., and so forth.
- 8) Purchases, acquisition and reading of professional books, articles etc. on philosophical, theoretical orientation.
- 9) Divisional/Department Committee work.
- 10) Observations within building context.

Figure 14. Origin of P.D. Activities

Internal ----- External

themselves.

When the ten professional development activities are plotted against the continuum as shown in Table 6, it becomes apparent that most of the activities are largely generated by the principals themselves. These activities are clustered towards the internal end of the continuum. Only three of the activities fall towards the external end.

One activity has been plotted at the middle. An assumption is made that principals who teach will be required to read the curriculum. For non-teaching principals the task is probably more of a voluntary type of activity. The clustering of the data towards the internal end of the continuum in Table 6, suggests that principals are generally self motivated in enhancing their own professional growth in order to facilitate the curriculum implementation process. It will be recalled from the previous chapter, that principals agreed with the rationales for change. This being the case, it follows, therefore, that concomitant actions taken for professional upgrading are consistent with principals'

Table 6

Professional Development Activities of Principals
With Mandated Curricula

How Initiated	Activities
External	
x	1 Division orientation inservices
x	2 Principals administration meetings
x	6 Division inservices for principals/ teaching staff
x	3 Reading curriculum guides
	4 Consultations
	5 Visitations
xxx	7 Professional organization activities
xxx	8 Purchases/Acquisition-Reading professional literature
Internal	9 Curriculum Committee work department and division
	10 Observation within building context

Note: Numbers correspond with those in Table 5.

thoughts on the need for change. In short, principals saw the need for change. This required some type of upgrading where there were skills or knowledge deficits in order to implement the curriculum to fulfill their students' needs. Principals, therefore, engaged in professional development activities on their own volition.

To summarize the above, two basic observations can be made from the data:

- 1) The division has recognized that professional development is necessary if curriculum implementation is to be successful and so has taken the necessary steps to provide such activities for principals. Principals' thoughts and perceptions of some of these activities have already been covered in the section on divisional structure. Principals have reported that these division oriented activities are generally successful.
- 2) The other observation that can be made is that principals are cognizant of deficits and shortcomings in their efforts to implement the curricula and so have undertaken on their own, the necessary remedial actions. The purpose of the professional development activities have been plotted on a continuum abbreviated in Figure 15. The participation variable could similarly be plotted (Figure 16) to show whether all staff participate, or whether only one participates.

Figure 15. Purpose of Professional Development

Enrichment Remediation Compliance

In this study, all principals participated in professional development activities of some sort that related to the curriculum implementation process. However, not all principals participated in all professional development activities shown in Table 6. All principals participated in over 60% of the professional development activities and a few had 100% participation rate.

Figure 16. Professional Development Participation Scale

One Few Some Most All Staff

The fourth component (Figure 17) shows why participation was made - whether mandated or by free choice.

Figure 17. Why Participate

Free Choice Mandated

These four components of a professional development activity, how initiated, purpose, participation and reason for participation are brought together as a staff development activity profile (Figure 18) against which selected professional development activities of principals are plotted to reveal the dynamics operating within the division and schools. As such, it lends deeper insight into factors that influence curriculum implementation. Using the above model, further analyses of the professional development activities of principals and teachers will be made. First however, an examination of the nature of these professional development activities will be undertaken.

Divisional Orientation Inservices for Principals

It was observed in the section on divisional structure that the school division has a policy of holding orientation sessions for principals when new curricula are introduced. The regular principals' meetings also serve as a forum for discussion of implementation problems. The orientation sessions have generally been viewed as worthwhile and helpful to principals particularly to those principals who are not involved with the curriculum committees or with some of the area groups professional organizations. A principal

summarized the role played by the division in professional development activities:

I guess the first step our division has taken is to make certain that principals are very much aware of the curriculums, what they are, and also be aware of the dynamics of curriculum implementation In the last two years, our division had at least three workshops; last fall was the most recent one. It was a two day workshop on curriculum implementation. We had Dr. Stapleton from the University of Manitoba, who came to speak to us, and a number of other speakers we've had. And they simply talked about the development of curriculum and how curriculum is implemented, the stages that teachers have to go through, the awareness stage, and so on. Just so that we are very much aware of the fact that you just don't bring a curriculum in, give it to the teachers and say, tomorrow, now I want you to use this. So I think that's part of the strategy the division has had to get principals as familiar with the curriculum and how curriculum implementation works, before it actually goes into the classroom. Then the teachers know that they have someone supporting them, someone who understands what they're going through which is quite different, than, what I recall when I was a first year administrator. I was in the rural division fifteen years ago and a new reading series came out; and there was no question, that was it - they just put it in. As an administrator, my role was to put it in. We really didn't take into consideration the feelings of the teachers and the investment they had put in their curriculum. The possible feeling of inadequacy exists when you tell a teacher what they have been doing for the last twenty years is wrong, and now you're going to start doing this.

The whole value system has changed, and we are more aware of that I don't know whether the other divisions are doing this, but I know Prairie Division is doing this - in terms of a lot of workshops, a lot of inservices for principals on curriculum. If there is a strategy, that's it right there.

One principal was constructively critical of some of the inservices that were put on and made suggestions for improvement of these inservices as follows:

The role of the principal (i.e. in curriculum implementation) is important. First of all, you have to know the curriculum more and sometimes with all the changes right now, people don't have the time to read things twice. They put them on the shelf and that's where they stay. Yet, if the principal had the time or was properly inserviced, then, he would know what he is talking about and then he can check his role, that is to check to make sure that the core components of the curriculum are being handled. I guess I'm being a skeptic right now. Now, if this thing is important enough, it's a curriculum thing, the divisions are to free people and do everything they can. The Department should be coming up with some money as part of their curriculum expense to educate people about the curriculum. Now, in an hour and a half we're supposed to know everything we need to know about the new curriculum. It's completely another farce.

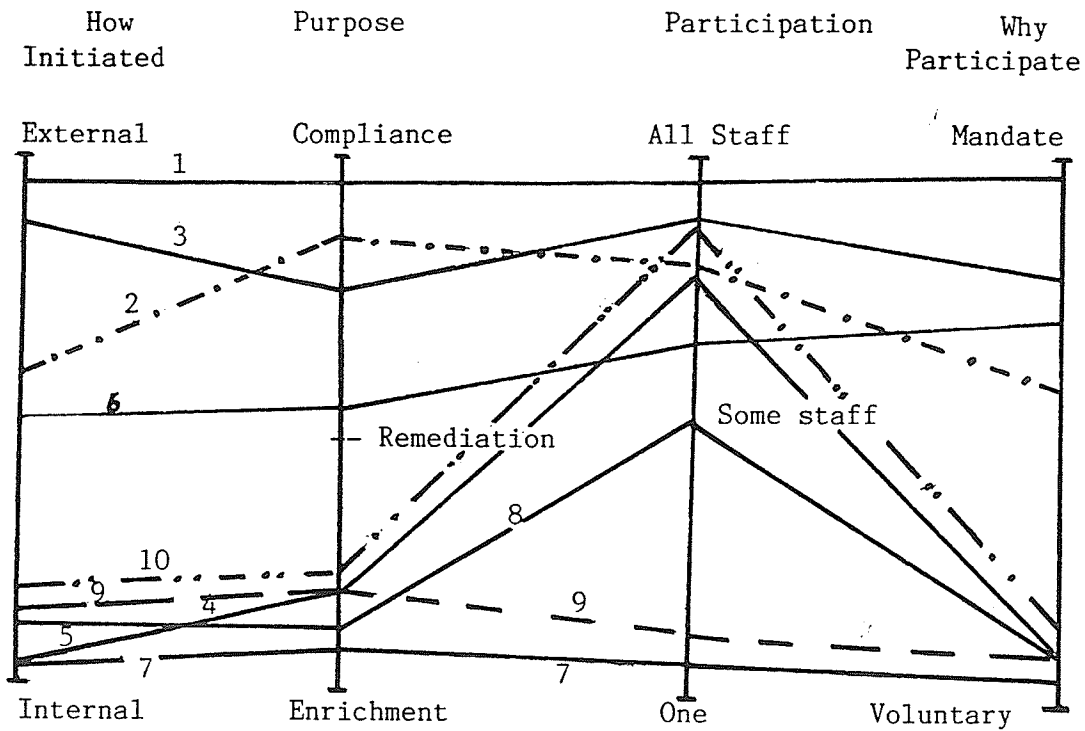
I guess, what they have to do is lay it on a platter to a principal. Take a group like the Prairie Area, twenty-four guys and gals, say, for the elementary people there is a new Language Arts curriculum. I'm suggesting, okay, if it is that important and you want it in the schools now, it puts extra pressure on me to take me away from the job for two days. But, take me away, it doesn't need to be out of town, just put it at the Agricultural Centre and we focus on Language Arts for two days, because people expect me to be a master teacher So I am expecting these things to be laid out to me and not in an hour and a half session with five other new curriculums. Focus on it, ... a day and a half kind of thing. And go through the units and say that's important here, here are the resources

Obviously, this principal feels strongly about the short duration of the inservices that have been provided. His

observations and criticisms suggest a more indepth analysis of these curricula should be made prior to their adoption into the schools. The criticism may be valid for it has support in the literature on implementation and the theoretical literature on staff development. It may be noted that the views mentioned above are a minority view and resulted from more probing indepth questioning. Also this principal was relatively new to the position with only one year in the principalship and could have missed out on some of the professional development activities. Further, this principal does not say that the short inservices are not helpful. They are helpful, but he thinks they are inadequate for the tasks at hand.

The divisional inservices for principals are shown in the staff development activity profile (Figure 18). The profile shows some of the organizational characteristics of this professional development activity; it depicts top-down planning and implementation with participation being mandated. The top-down profile does not indicate whether the activity was effective or unsuccessful. Such activity indeed, may be successful. The literature, however, has provided overwhelming evidence that where "ownership" has been viewed as external to the system, failure to implement is often the case. Most of the available studies, however, have

Staff Development Activity Profile For Principals With Mandated Curricula.



(Model developed after Fenstermacher and Berliner, 1985)

CODES

1. Division orientation inservices
2. Principals administration meetings
3. Reading curriculum guides
4. Consultations
5. Visitations
6. Division inservices for principals/teaching staff
7. Professional organization activities
8. Reading professional literature
9. Curriculum committee work-department/division
10. Observations within building

NOTE: 4 and 5 overlap

focused upon teachers' implementation in the classroom. There is a paucity of research on this aspect of the principalship. In this study, it does not appear that the top-down profile had any negative effect upon the principals' implementation activities. A possible hypothesis is that the principals themselves are administrators and probably did not view the activity as being top-down. If anything, such inservices, because of the shortcomings, may have encouraged the principals to further their own professional development through other activities such as familiarizing themselves with the details of the curriculum guides. But how did they perceive this activity and how did they undertake this task? The following subsection looks at how principals viewed the innovative curriculum guides and used these for their own professional development and implementation practices.

The Curriculum Guides as a Source of Professional Development

It will be recalled from the section on the Rationale for Change that some of the views about curriculum held by principals were similar. All felt that the curriculum should be a guide with sufficient built in flexibility for classroom implementation. A few felt that the curriculum was the school's program and should be

implemented as developed. These views are not necessarily inconsistent with the current activity being analyzed i.e. the principal's familiarization with the guides.

If the curriculum were viewed as a guide, or the program of the school and the principals were responsible for seeing that the curriculum was implemented, then it follows naturally, that they should know what the curriculum entailed, required or demanded. In order to accomplish this task, all principals in this study embarked upon a crucial undertaking viz. reading the curriculum guides. One of the major concerns of the principals at this stage was the massive amount of new curricula being introduced at more or less the same time into the schools (Refer to Figure 1). This factor led to variations in the amount of reading, the type and quality of reading, and the function of the reading undertaken. Due to the nature of the administrative tasks explored in the literature review, and the time component observed in the section on materials, more than half of the principals took the curriculum home for bedtime reading, though one principal commented that this activity "is a deadly boring thing" and "was like instant sleep" for him. This remark does not mean that the curriculum itself was boring or sent the principal to sleep, but was used rather figuratively. His following remark revealed a more

serious problem inherent in the curriculum itself. This factor was observed in the previous chapter as a problem of complexity. "I didn't get through more than one and a half pages at a time. I didn't know what they were saying. I didn't know where they were coming from". This problem ties in with the professional reading undertaken by many principals. "So you have to start way back and you have to get articles".

Like the other principals, this one noted that "you have to start by reading the curriculum yourself". And another principal said basically the same.

The first thing for me was to become more familiar myself. Over the years as a principal, I used to take pride in the fact that I knew the curriculum fairly well, any of them fairly well. And that I felt I could pretty well tell you the content for most of the grade levels, K-6, and I no longer feel that way. For me, it has been a lot of reading, extra reading this year. Not just (professional) reading, but reading the curriculum, and I don't have a good handle on it yet. I think in the primary levels now, I know where my staff is going, but in the intermediate, not quite the same The Social Studies I've gone through. I'm not worried about it. I'm not worried much with the English Language Arts anymore. I think I know it well enough, but the computer, I really don't know, and the French I've hardly touched. I've had to prioritize in the school for myself.

The comments and observation from a few more principals are revealing and consequently noted here. (This principal teaches half-time).

The first thing I had to do was to sit down and read the curriculum. When I was appointed to this school, that was my job to take home the curriculum. Many of the curriculums, I have to be honest and say I still haven't read them for all the grades. But I have tried to read all the brand new ones that are coming out.

Another teaching principal makes essentially the same comments.

I have got them up here but haven't read them thoroughly to say that I know everything about them. I would not pretend to know that. I don't profess to know what's in the Grade 3 Language Arts or in the Grade 2 Social Studies, or whatever guide. That's one of the things about the new curriculums, that there's so many of them, even the teachers are having a difficult time getting through them all. Anybody who says they've been through them all, got it pretty much absorbed in their minds and is teaching as well, I question that.

With regard to not knowing fully all the curriculum, another teaching principal provides this observation.

We realize that we can't possibly know all the curricula backward and forward and I think that there are some principals who think they can. I know of nobody who can do that. I feel that if the speed of the curriculum implementation was determined by my knowledge of the curriculum, then we'd be waiting a long time before I got through all the curriculum before I could implement it. So it has to be faster than that. So the only thing I can do is to be generally aware. That's my personal step, to be generally aware. I spent time being as keenly aware of what the curriculum was, kind of the main philosophical points. I was looking for the main philosophical points. I wasn't looking at specific lessons, and just a keen awareness of trying to know each of the teachers; see where they are coming from, their reactions, listen to their questions, not

become defensive if they criticize, just try to find where they are coming from and try and work with them.

So then, the function this principal attaches to his reading of the curriculum was to familiarize himself with the main tenets of the curriculum, but more so with the philosophical thrust and to measure this against his teachers' philosophical orientation, and eventually, to see how their philosophical interpretation translated into practice. This principal read to see whether the underlying intents of the curriculum were being implemented.

Another principal focused his reading with the specific aim of understanding the philosophy behind the new curriculum and changing his teachers' attitudes towards taking a different approach at instruction. This principal, like the one immediately above, was not too concerned about content. He felt that teachers were pretty well set in their ways; an observation revealed in the literature and one that has been responsible for the failure of many an innovation in the schools. "The big thing", observed this principal, "is changing teacher attitude". Obviously, experience has taught this principal that entrenched paradigms are not that easily toppled. He described the nature of his reading of the curriculum guides.

I've had to do more reading and I think I've been much more inclined to become aware of the philosophy behind the new curriculum, rather than the content. I don't worry about the content. I think that's the teachers' responsibilities, and it's there; there's no problem finding that. I guess I see my specific role as more in terms of changing teachers' attitudes from the way they've been doing something for forty years. Changing their philosophical bent towards something if it seems to be what's needed. Just generally feeding them the sort of information that keeps them thinking critically about what they're doing.

So then, reading the curriculum guides constituted one of the major professional development activities for all principals. This activity is consistent with principals' views on the rationale and function of curriculum. Principals, however, varied in their reading. Most took the guides home as they did not have sufficient time to read them at school. Some principals read the guides in considerable detail while others did not. Some read for content; others read for the philosophical thrust. Some appeared to focus mainly upon those curricula that they prioritized and placed emphasis on. The massive amounts of curricula coming into the schools appeared to have led to the prioritization, as well as the fact that half the principals were teaching principals and really did not find the time to go through all the curricula in detail. Rutherford, Hall and Newlove (1982), viewed this problem in their model of the Change

Facilitator Stages of Concern as a Level 3 problem i.e. one of "Management" concerns. The problem of the efficient use of the principal's time certainly played a crucial role in determining how the principal utilized the curriculum guides. All principals, however, read with the view of becoming more knowledgeable in order that they could supervise implementation more effectively. This concern is viewed in the Rutherford et al. (1982) theoretical model as a Level 4 concern - "Consequence", where the aim is to increase the effectiveness of users and analyze the effects on clients. When plotted on the staff development activity profile, the reading activity takes the middle road partly because principals are mandated to implement the curriculum, and, in order to do that, they certainly must know what they are implementing. It is possible for the profile to take a more bottom-up perspective. Certainly, the professional reading activity does this.

Principals' Professional Reading and Other
Professional Activities

As the new curricula were introduced into the schools, more than half of the principals clearly indicated that they were involved with some type of professional reading, particularly with reference to the Language Arts curricula. While all the new curricula that

came out emphasized the holistic philosophy, the Language Arts was the most dramatic and was written with this perspective. Principals, therefore, had to go beyond the curriculum guides in order to get a handle on this curriculum. Mention has already been made about how one principal encountered this problem. The following statement examines how he proceeded to resolve his dilemma and concerns.

I didn't know what they were saying. I didn't know where they were coming from. So you have to start way back and you have to get those articles. Fortunately, we have a Language Arts coordinator and he supplied us with a lot of background information and articles. So you have to go through the process of reading those things so you know what's going on. I can't see how you can implement that program just sort of by manipulation. You sort of have to know what's happening So you really have to read, read and read ... guided reading because it's such a massive field you have to know where you are reading. You don't have time to read everything, so you have to have someone making judgement calls as to what books to read and things like that.

Principals have also received professional materials from their staffs as well as made their own purchases. Those who are involved in professional associations have also had input from this source. In this sense, principals have been self-motivated to improve their own knowledge and skills in order to facilitate the curriculum implementation process in a more effective manner. One of the principals commented on how he goes

about the process of acquiring professional reading materials.

For myself, I had to purchase some books of my own and do some reading. I, of course, was involved. I had read that curriculum (i.e. the Language Arts) when it was the Interim Guide, when it was still very rough. I worked on that committee. So I was a little ahead of some of the other people and I realized things that were happening were not quite where they should be

Our resource teacher has been excellent in finding materials in quarterlies or in the Language Arts Periodicals etc. She will show them to me or we will duplicate them. She points them out to the staff There is quite a bit of that happening.

Other principals have made similar comments about staff sharing professional materials. Principals are not only inserviced from above; they also receive professional development from below as well. The sharing is perhaps more reflective of a positive climate and a measure of collegiality operating within the schools. On the staff development activity profile, (Figure 18) the professional reading of principals is shown at the bottom of the graph. The activity is self-initiated for enrichment, done individually and voluntarily.

One of the principals strongly related professional development activities closely with his background training and involvement with professional organizations. He rationalized his professional activities with his ability to provide guidelines and help, and to supervise

effectively, the implementation of his curriculum. He felt that such background knowledge is important to "know what's happening in the process and how children learn". Without this knowledge one is "really out at a disadvantage as an administrator" and so is more "a managerial kind of person and not aware of what's going on out there". He commented,

I feel as a principal of this school, as administrator of this school, if I couldn't go into a classroom and do the job that that teacher is doing, as well or better, then I shouldn't be in this position So, I'm not an instructional leader then.

Some of the feelings of this principal about his professional development and his instructional leadership are noted below.

In terms of my particular background, I've always been interested in reading, and I've always been involved in things, say the International Reading Association. So, I'm heavily oriented to the English Language Arts myself, which makes it probably much easier for me to do something with that particular program than it would be for someone who doesn't have that kind of background. Now, I can't understand why anybody in a school situation, especially in elementary schools, doesn't have a good background in English Language Arts and reading. They are really at a disadvantage, as an administrator, if they don't have it. They're just a managerial kind of person and not aware of what's going on out there. They're not very much use to teachers; I don't think. To me, in an elementary school, it is so important that you know what's happening in the process and how children learn. And you know, I can be a good adminis-

trator and get all these things and all these materials and all that, but if I really don't know what's going on, I can't evaluate that. I can't make any judgments about what their teaching is like and that sort of thing. So I'm not an instructional leader then.

Obviously, this principal is thinking of a deeper aspect of curriculum, not only from an administrative perspective, but from an interpretive view point as well. "... It is so important that you know what's happening in the process and how children learn". The above principal, and one or two others already mentioned, have been involved in professional organizations and in curriculum committees at the divisional and provincial levels. These have been sources of professional development for these principals. The newer principals have also been involved with consultations with their more experienced colleagues and with visitations to other schools, as well as with the divisional inservices that have been conducted for teachers. These activities, as well as observations made by principals as part of their managerial duties, constitute important learning activities for principals; these activities, as mentioned by the comments of the principal above, are crucial for "instructional leadership and curriculum implementation".

The observations principals make in the classrooms and incidentally in their buildings, are also very

important sources of learning that principals acquire as they go about the process of curriculum implementation. One of the principals above has already mentioned that it is important to "know what's happening in the process and how children learn". Another principal viewed this activity as very important for him as well.

I think I should also add not with the curriculum, but learning with the youngsters. It's fine in theory, to sit down and read youngsters development stages and so on, but, I really have forgotten what a Grade One student was like. I've had to stop and study that. So, it's it's been very much an interesting and very rewarding learning experience So, it's been a learning process for me.

These activities are in fact part of the learning process that principals undergo as they implement new curricula with major changes that are different from the status quo. The above mentioned principal described the entire process as follows, "It's very much a learning process for myself". And as can be seen from the descriptions in this section, it is a learning process for others as well. Rubin's (1987) and Fullan's (1987) comments may be recalled at this juncture - educational change is learning. Principals learn not only to correct deficits in their background, not only to facilitate supervision, one of the major administrative activities, but to facilitate the curriculum implementation process in such a manner that their pupils' learning becomes

worthwhile and meaningful.

Summary

It has been recognized in the literature that professional development is necessary and must be concomitant with the implementation of new curricula in schools. The lack of professional development, when new curricula are introduced, results in non-implementation or some form of adaptation that is not entirely congruent with the intents of the curriculum.

The school division has recognized the need for professional development when it accepted and adopted the new curricula for implementation in its schools. As a result, therefore, the division held orientation inservices for its principals, established curriculum committees for each new curricula, and hired consultants to provide additional assistance to principals. The Department of Education also held inservices in which principals participated. Principals also participated in the divisional inservices held for teachers.

Divisional orientation inservices for principals were generally thought to be helpful in providing a sort of cognitive map for principals but found to be inadequate for actual implementation practice in the classroom. One of the major activities in which all principals engaged was the obvious familiarization with the curriculum

guides. These were prioritized and read somewhat selectively due to time pressures and their rapid introduction into the schools. The guides were read for their detailed content as well as for their philosophical underpinning. Principals also became more knowledgeable through visitations, consultation with colleagues and resource personnel, as well as through classroom observations of pupils' work.

Some principals participated in professional organizations and in provincial or divisional curriculum committees. These activities were found to be helpful in facilitating the curriculum implementation process. More than half of the principals also purchased materials at their own expense or acquired professional literature for reading. This activity was thought to be particularly helpful in providing the philosophical background knowledge for unlocking the deeper intents of the curriculum and also for providing direction to the teachers in their implementation practices. Most of the professional development activities were initiated by principals' and were found to be consistent with their rationales for change and perceptions of curriculum. The professional development activities were reported by principals to be helpful in their efforts to implement the innovative curricula.

Professional Development Activities of Teachers.

Principals' Involvement in Professional Development
of Teachers

The underlying theoretical principles of staff development discussed under principals' professional development activities are even more important where teachers are concerned primarily, due to the fact that teachers are closest to the actual implementation problems and progress of the innovation.

The principal, as the middle manager in the divisional education structure, is perhaps the most important person at the building level. He is at the top of the school's organizational structure and is responsible for the effective functioning of the school. It is the principal's responsibility to ensure that the curriculum prescribed for the school is implemented. Two of the principals described their feelings about their responsibilities. "I believe strongly in the immersion of the principal in parts of the curriculum." Another principal said, "I feel that curriculum implementation is my job; therefore, I need to be involved in it." One of the ways in which principals have been involved in the implementation process is through involvement in professional development activities with their staffs.

It was observed that principals are involved directly

in their own professional development. They have also intervened directly with staff on a group and on an individual basis to provide professional development assistance. They have also intervened directly in providing resources and opportunities for the professional development of their staffs and indirectly through the provision of a climate conducive to professional development activities. A description by a teacher perhaps sums up the involvement and concerns of principals in this study.

He really cares and is really interested in curriculum implementation ... asking where we need help and arranging it. We had a whole day that we spent on computers on one of our inservice days, and before that, he (the principal) went around and said, well, what are your needs for that (P.D. day) and a number of people said their needs were computers. So he organized it all. So he really responds to our needs in that respectHe does really want to know what's going on and wants us to know what's going on. So he is quite excellent in that respect.

Many of these activities have been done within the framework of the divisional structure. The division provides consultants, inservices, and has allocated eleven teaching days for professional development activities. In addition, funds, though limited, have been made available for staff participation in conferences and other professional development activities.

Table 7 shows the professional development activities

Table 7

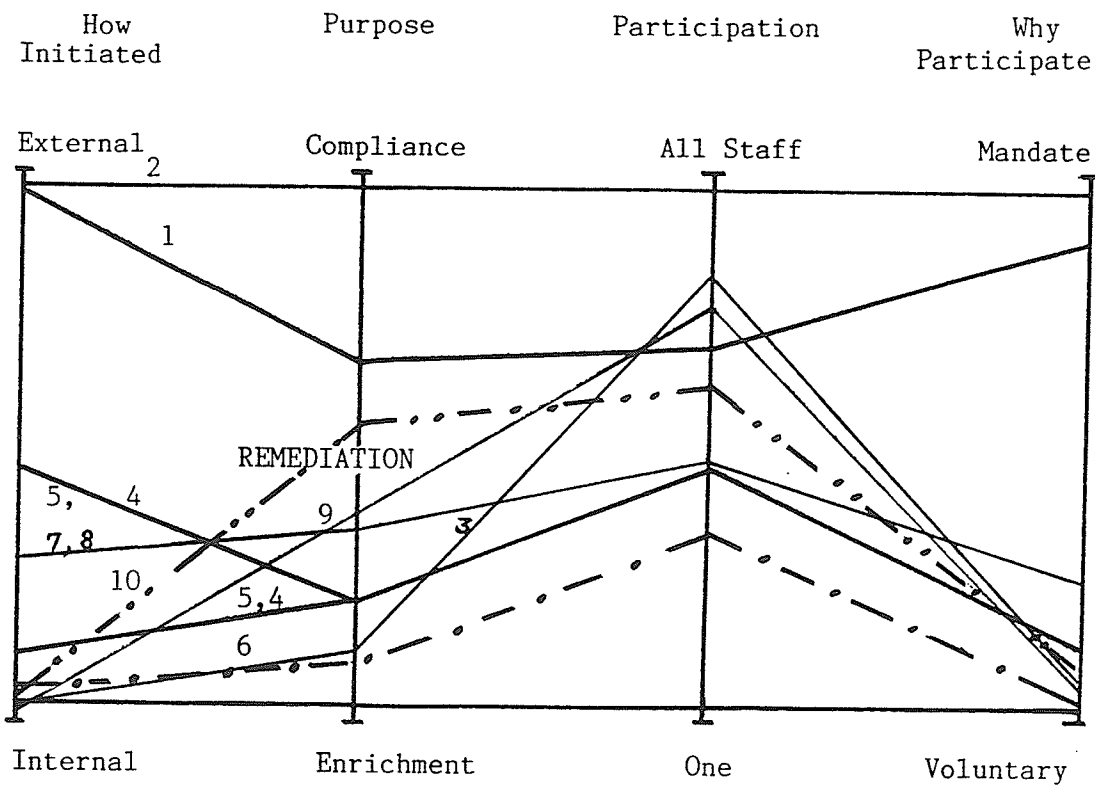
Teachers' Professional Development

- 1) Divisional/Department (of Education) Inservices.
- 2) Reading Curriculum Guides.
- 3) Visitation to Schools.
- 4) Professional Conferences/Organizations.
- 5) Professional Reading.
- 6) Curriculum Committee Work.
- 7) Formal/Informal School Staff Exercises with Principals, Consultants.
- 8) Individual Conferences/ Consultation with Principals, Consultants and Colleagues.
- 9) After School Workshops.
- 10) University and Other Short Courses.

in which teaching staff have participated. Some of these professional development activities are similar to those in which the principals were involved (Table 5). An examination of Figure 19 shows that most of the activities are initiated by teachers themselves, thus, revealing a "bottom-up" profile with its attendant dynamics; however, some principals reported they were instrumental in providing encouragement for many of these activities. One of the principals discussed his

FIGURE 19.

Staff Development Activity for Teachers.

CODES

1. Divisional/Department Inservices
2. Reading Curriculum Guides
3. Visitation to schools
4. Professional Conferences/Organizations
5. Professional reading
6. Curriculum Committee Work
7. Staff inschool exerciese - principals/consultants
8. Consultation with principals/consultants
9. Voluntary after-school workshops
10. University/other courses

(Model developed after Fenstermacher and Berliner, 1985)

involvement with his staff in the implementation process.

The principal's job, role, I think I should say, is to define the needs of the school and then work at that. In the case of the Language Arts, we have Mr. M... at the division office helping us with the Language Arts. He comes in and looks at what teachers are teaching in their classrooms. He spends time with them, and he is at call to me. If I see certain needs, I will call him and he will come and talk with the staff, work with them individually, or whatever needs that we together decide are there.

The involvement of this principal in the implementation process is in the identification of training needs of his staff. Where the principal himself lacks the expertise, he calls upon the divisional consultant, in this case the English Language Arts Consultant, to provide the necessary training and assistance for his staff. The role of the consultant, a sort of second change facilitator, appears to be crucial, not only for staff development, but for the success of the implementation as well. This type of staff development activity has been identified in the theoretical and research literature as one of the more effective types of professional development activities available to teachers (See for example, Hord and Hall, 1987). Teachers participate with their principal and consultant in identifying the needs. The subsequent training is ongoing, interactive, practical, concrete and specificity oriented in identifying problems in actual practice and responding to

these problems.

The ongoing interactive nature of the staff development activity has the effect of blunting the tendency of such efforts to become transient or mechanically routine as has often been reported in the literature, for example, Bussis et al. (1976). Moreover, the acquisition by staff of the conceptual and theoretical underpinning underlying the change rationale has operated effectively to anchor the staff development efforts and, thus ensure more indepth implementation.

The principal just quoted above, ensured that his staff understood the conceptual underpinnings of the new curricula and planned with them for their professional growth. He commented:

I saw a need in the school where the resource teacher for example, was not fully in-tuned with the new curriculum, the new philosophy. I saw some of the teachers were moving toward that direction. Others who had taken some more training, more recent training, were versed with the new curriculum. With the pull out program with our resource teacher, I noticed there was a definite disparity in the philosophy of the two. So then, I went to the resource teachers and I said, 'How do you feel about this?' We talked about the whole area The resource teacher realized she had a need and with the people from the Department of Education (we) met together to help them understand the new philosophy I didn't say we have a need, let's do it. It was done slowly and carefully, rather than pushed.

Principals provided numerous opportunities for professional development activities for their staffs and

utilized various strategies. These activities were provided on the basis of identified needs by the principal, the consultants and the staffs themselves. Most of the professional development activities were carried out on a voluntary basis and would, therefore, be reflective of a bottom-up strategy on the staff development activity profile (See Figure 19). Some of these professional development activities are discussed in more detail in the following sub-sections.

Divisional/Departmental Inservices for Staff

One of the first types of professional development activities provided for staff within the context of the innovative curricula has been the orientation inservices organized by the School Division in conjunction with the Department of Education. "The main inservices," noted one principal, "will be set up in the division and, of course, division-wide inservices is of no cost to the teacher." The main function of the earlier inservices was primarily to introduce the innovative curricula to teachers and principals. Principals already would have had some prior orientation. It was observed previously, with the principals and in the discussion on the structure, that the Division identified the need for professional development. With regard to the inservices, one teacher commented "that the school board is sort of

recognizing and responding to teachers wanting to keep up with things." Another teacher responded in a similar positive note. "The division does hold inservices for the implementation of curriculum and they encourage teachers to attend" Teachers have stated that these orientation inservices have created an awareness of the curricula as well as demonstrating the use and availability of materials, but that specific oriented types of inservices were required for better implementation. The division inservices for the Computer Awareness curriculum were specific oriented.

The Computer Awareness inservices were done through the divisional curriculum coordinator and the committee system and appeared to have had more success than some of the other divisional inservices. A teacher accounted for the success.

I was on the computer curriculum committee last year in the division and what he (i.e. the curriculum coordinator) did was he left it to us; ... the three primary teachers organized the implementation for the division teachers from K-3. And our teachers were all inserviced before the curriculum came out with a handbook on how to do it.

They had two hands-on inservices: one on the curriculum and one on the logo. By March, 8, all that was done so the teachers had March and June to experiment with what they wanted to do. When the K-3 curriculum came out this year (1985), in December or January, our teachers were familiar with it. That's the Computer curriculum. That's how that curriculum, for me, started at the division level.

The computer inservices were immediately followed up with in-school inservices, mainly conducted by staff themselves many of whom had taken university courses or other professional workshops across Canada and the United States. The fact that these computer inservices had a large measure of staff input, with teachers training other teachers, contributed to the success of the inservices.

However, it appears that not all the innovative curricula had divisional orientation inservices prior to their implementation, such as the Computer ones nor did all divisional staff participate in all these inservice sessions. A teacher expressed some bitterness about the process.

It seems that our inservices have taken that direction after the curriculums have come out and people have already been using it or supposed to have been using it. And that's when the inservicing comes, and that's when everyone has all these questions; like I don't know what I'm doing. I get the idea that people are kind of bitter about it. ... Maybe, if a little bit of it was done the other way around, have the inservicing before the curriculum; you know, we are supposed to be implementing it, it might help.

One of the newer principals expressed similar feelings to that of the teacher above. He felt that teachers who have "a low priority" of the new curriculum, have not been properly inserviced prior to the introduction of the new

curricula into the classroom. Both principals and teachers agreed that the time allotment for inservicing teachers on the innovative curricula was inadequate. One of the teachers who was deeply involved in the implementation process as a second change facilitator was very critical of this factor and made suggestions for improvements in the system.

Implementation is tedious and time should be provided. We all have families, and commitments, most of us. I think at a time when so many new curricula are coming in, one suggestion that should be made is that every new curriculum that comes out, six or ten hours of school time should be allotted. Parents should be told in August, that in September, October, March, April, May there will be 2 hours on Wednesday afternoons when children will be released at 2:00 p.m. so teachers could meet and talk about it because it is really a very heavy thing. There should be a Department policy, not so that teachers are saying we need more time; no, the Department is saying we are laying this whole case on these teachers; we are saying, for this year, to implement the Social Studies, these times will be allotted. So it takes the pressure and public opinion off the division.

One of the principals felt that the inservices

seem almost after the fact, because you've got the curriculum in place supposedly, and here are these people (teachers) having to scramble to try and figure out what's going on.

The consensus of feelings by both principal and teacher is that the divisional wide inservices, that are more grade level specific and oriented to practical classroom problems, are more helpful. Moreover, some

principals and teachers felt that there should be more inschool inservices than divisionwide inservices "so you work on it and comment on it." The teacher who served on the computer committee felt that divisionwide inservices are probably only about 20% effective and that "where they are really effective are with small groups". Another teacher commented,

I think it would be a good thing within the division, maybe to set up things at grade level. I always like meeting people from my own grade level and sharing ideas with them and hearing what they're doing.

One of the principals made a similar observation as made by the teacher above.

The inservices my teachers tend to find useful are those where they meet with people particularly in their own grade level where they get the opportunity to discuss and exchange information which is pertinent to them rather than a division wide inservice.

Principals and teachers have recognized the shortcomings of the divisionwide inservices and have been advocating changes in the system. It was suggested by a principal, that the divisionwide inservice days were "set a year in advance", very likely for ease of administration and for flexibility at the school level. This was a somewhat paradoxical situation in that the intent of the division was the effective implementation of the new curricula, but one of its administrative policies was likewise hindering this effort. To what extent implemen-

tation was hindered was not determined in this study. Divisional inservice strategy was viewed as problematic for staff.

A principal who was very much involved in the implementation efforts described the effect of this situation and the action they had been pursuing to change this policy.

We do not have enough control over the division-wide inservice days, in terms of the flexibility to allow people to go to sessions that are in schools here. I am agitating at the division level to have more flexibility for our eleven days that are allocated to schools, so that we can take those days at this particular school when there is something that comes up, or as the need arises, rather than having that day allocated for May, 17th. and we have to scramble and make up something for that day. Then, if there was a conference that was on this theme, we can take that day and use it at that time.

The Curriculum Guides

Notwithstanding the difficulties encountered with divisional orientation inservices, principals and teachers have been working at the implementation of the new curricula through other strategies. Accessing the curriculum guides for the innovative curricula, and reading these to understand the philosophical intents, as well as the content, relevant resources and so forth, were among the first activities related to implementation. Principals were deeply involved in this process; they secured the guides for their teachers as well as

engaged in professional development sessions with their staffs in order to read and comprehend these guides. Both principals and teachers reported that "getting the curriculum guides and looking at those" constituted an important part of the implementation process. Principals saw themselves as responsible for getting the guides into the hands of their staffs. A principal commented, "'When you first start, you make sure that everyone got the curriculum.'" Teachers commented very favourably about how their principals made sure they (teachers) had these guides. "'We were given the curriculums You sort of have it a good year before the implementation date. We always had them prior (to the implementation) and sort of eased into them'". Another teacher made a similar comment.

In the school, the principal is very supportive and encouraging teachers. (He) makes sure you've got the curriculum and you know what's in that curriculum. I know when we had a Language Arts discussion, we all made sure we knew the highlights of the curriculum so we could discuss it intelligently and our feelings about the curriculum.

Again, another teacher responded in a similar vein.

I do see that Billy [name changed] really cares, and is really interested in curriculum implementation and he has done a lot of talking with us about how we're using the curriculum guides and asking where we need help and arranging it.

The introduction of many curricula into the schools

at the same time placed a great deal of stress upon teaching staff one of whom reported that she varied her reading of the curricula in order to cope with what appeared to be an overwhelming situation. "'I did a lot of reading, reading parts of the guides. I seem to pick and choose and then from there I sort of choose other stuff.'" The introduction of the massive amounts of these innovative curricula into the schools, not only created stressful situations, but put extra burdens upon the shoulders of both principals and teachers. A teacher responded that she literally had to "work day and night" to get herself

ready to teach all these curriculums in the same year You yourself have to learn. There is a lot of preparation to it. The curriculum guide is a big book, but you have to do an awful lot of work to get it ready There is a great deal of work to do.

This teacher, as well as others, "appreciated" the efforts of her principal who intervened to ease their tensions through the establishment of a strategy of incremental implementation. "'Take it,'" said the principal, "'and you work through it and you have up to five years to get it all developed the way it should be (developed).'"

This principal used a rather unique strategy that tied in the reading with the actual implementation. He

wanted "to make sure that what they (his staff) were doing was actually in the guide." He thought that his strategy

forces them (in an organizational sense) to go through the curriculum They have to have gone through the guides and say, I'm doing this and I'm going to do this. That shows that I'm doing something and plan to do something more to implement the new curriculum.

The principal commented that he was not "a bush beater to say "hey! get going around here"". Rather he provided a "kind of incentive" to get his staff moving. He also provided time for the staff to do it. This he thought was very important. "We got an hour and we are going to use that; we're going to sit down and read the curriculum now." Like the principal above who integrated the staff reading with actual implementation, one of the teachers revealed an interesting method she used to enrich her own skills or remediate deficiencies, and at the same time implement the curricula as intended, meeting the needs of the students as well.

The pattern I take for each subject area, especially when there has been a new one out, is I read it all out first. I think that is really important to a lot of people. Read the guides really well. Study them kind of - then I try. What I do is pick an area each year and really focus on that. I go to inservices on it I see what my needs are in terms of where I need to learn and where the gaps are and so on I made sure I learned about that and actually implemented a pro-

gram in the classroom and evaluated it. So I usually read the guide first, really well; go to inservices in that area, then I do a lot of personal reading. Read things in journals and books. I'm very lucky that I have two other teachers who are very like minded and who are very keen in this school and we share a lot of materials and other stuff that we come across.

What I do when I implement stuff is that I try something that is my conception first, from all my readings etc., evaluate it and then let the kids change it ... and then I'll know next time better how to do it so it's more appropriate to the kids. I usually change it a little to make it more child-centered. But I go back and read the guides again once in a while, parts of it. I always like to grow in every area.

What this teacher has revealed is that she first reads the curriculum to gain a good overall cognitive map of what is required. She attempts to understand the meaning of the changes required and how these fit into the entire change process. She reads, implements incrementally, modifies, then rereads to refocus to see whether she has grasped the conceptual underpinnings. This approach was described in the research literature as being necessary if the innovation was to become durable and an integral part of continuing practices (McLaughlin and March, 1978; Bussis et al., 1976; Fullan, 1982). Moreover, continuing interaction with her principal, colleagues, pupils, professional literature, and the curriculum itself, helps to integrate the entire innovative process and, thus, anchor the new practices in a more durable manner. It appears that this teacher has conceptualized the deeper

meaning of curriculum and curriculum change.

The activities of the principals also indicated interaction with, and support for, their staffs' efforts as well as an understanding of the concerns of their staff. The provision of the guides and assistance with their reading and understanding ensures that implementation has taken place. The building level strategy effected by all principals indicated not only an understanding of the problems of coping with massive amounts of new curricula introduced simultaneously, but also a comprehension that implementation success can only be achieved, through small, incremental sections of various curricula over an extended period of time rather than attempt to cover the entire curricula in one year. The concept of "divisibility" so often referred to in the literature has really been internalized and put to effective use in these schools through the interventions of the principals.

Other Professional Development Activities

In this sub-section, the other professional development activities of teachers will be presented and analyzed. Examples of principals' involvement in these activities will be given to illustrate how principals are involved in the professional development of their staff in order to facilitate the curriculum implementation

process.

In addition to the professional development activities already described and analyzed above, instructional staff are involved in numerous other professional development activities that relate to the implementation of the innovative curricula. Some of these activities have been carried out during school hours with time provided by the principals as well as on a voluntary basis outside school hours. As a matter of fact, teachers spent a great deal of their own time and resources in these professional development activities: for example, taking university courses, at night or during the summers, that relate to curriculum implementation; purchasing and reading professional literature; and attending conferences and workshops. Most of these professional development activities were carried out on a voluntary basis by teachers, an indication of teachers' attitudes towards their duties. The teachers in this study took their duties seriously with a sense of industry and efficacy. Principals lauded their staffs for their attitudes and efforts to participate in professional development for better curriculum implementation.

One of the more frequent types of professional development activities undertaken by staff was school

visitations. All staff, including principals, were involved in this activity. Principals provided time for their teachers to make visits to schools that were piloting new programs or implementing innovative programs. The effects of these visitations have been mixed. Some teachers felt that the visitations were insightful while others felt that more time was needed for more indepth observations and discussions with colleagues.

Another series of related activities that involved staff were attendance at professional conferences, meetings of professional organizations, for example, the International Reading Association, subscriptions to professional literature, or taking university extension courses. Principals were involved in some of these activities through encouragement, participation or administration. "'We try to encourage them to go'" to conferences, said one of the principals. Another principal made administrative arrangements so that his entire primary staff could participate in an out-of-town full day workshop on Whole Language. He described the thinking and strategy behind his actions.

I went into the classroom that day so that the whole primary staff could go to Oakville (the conference site) and see what was happening. We provided subs (substitute teachers); sub money is very limited as well. In the

Intermediate section, I've done a similar thing I again went into the classroom to save on sub money and make it possible for them to go. Actually, this was sort of a self-sacrifice because I should have really gone as well and seen these programs in action, but rather than not send anybody, I felt that it was important that they go and I'll have to do additional reading and so on.

This principal also provided professional reading material for his staff. Staff members also shared professional literature. The above principal commented.

I find material I could show them (i.e. the teachers). Our resource teacher has been excellent in finding materials in quarterlies or in the Language Arts periodicals etc. She will show them to me and we will duplicate them or she points them out to the staff, or they will get a copy of their own. There is quite a bit of that happening.

Another principal spoke about the professional expertise of his staff. He thought that some in his staff were well informed.

They are well-informed and usually they would be people who belong to outside organizations like CEL and IRA. They are well read; they have their own kind of library. They can relate to the material (i.e. the innovative curricula). They talk to other teachers on a classroom kind of level; they know the practical kind of things. We have several such people on the staff fortunately. I don't know what I would do if we didn't (have these members) because they are so important to the process (of curriculum implementation), and so, they are very key members in the team.

This principal, like a few others, appeared to be using his more knowledgeable staff, the "key members," in assisting other staff members in the curriculum imple-

mentation process. Another principal, using a similar strategy, identified "the pocket of interest" and utilized "that pocket" to assist him in the implementation process. He stated:

Once I develop that area, it's going to be there. It's going to stay and the spin-offs from that is that they spill over working with other teachers. It is a slow process, but I believe it is a more secure process.

Not only does this principal use his knowledgeable staff, but, by utilizing the concept of observability, was able to effect changes with his other less knowledgeable or reluctant staff as well. Admittedly, the process was slow, but the principal thought that the changes were more durable and effective. It seems that the role of other change facilitators is important to the implementation process in this school division. Not only were consultants used as other change facilitators, but knowledgeable teachers as well. The importance of the use of other change facilitators by principals was identified by Hord and Hall (1987) in their Texas study. These other change facilitators were "important to the process" of curriculum implementation in this school division. All principals in this study have relied on those people to assist them in the curriculum implementation process. One principal quite frankly said, "I couldn't do all the implementation myself."

The thrust in the leadership roles taken by teachers in the curriculum implementation process appeared to stem directly from the professional stance taken by the teachers themselves and from the manner in which they viewed their duties, as well as their relationships with their principals. Many of these teachers attended professional conferences in the province and elsewhere across the continent - in California, Texas, Louisiana, Minnesota, Montreal, and across the Prairies, among other venues. While some of the cost of these conferences were met from the schools' professional development budgets, most of the conferences were attended at personal cost to the teachers. One principal commented that "they (teachers) probably more than matched our cost themselves. It's a personal commitment". A teacher described her participation in some of these professional development activities.

I took a lot of courses in Logo ... and it meant travelling ... and getting home at 2:00 a.m. ... I wish I had logged down the hours. I was in Toronto for a week and that I paid for myself. I got no contribution They (the School Board) support you, but the contribution is very small.

One of the principals commented upon similar activities of his staff. "These are additional things (i.e. activities beyond their normal duties) teachers have done to prepare themselves for the work they are doing."

Principals rotated their staff for participation at these conferences "so they each get a chance to go to a couple of workshops maybe in a year," stated a principal. On return, the participants were required to share their experiences with other staff members who did not go to the conference. The rationalization for the debriefing is perhaps best summarized in the words of one principal.

Whenever they go to a workshop, I'll have discussions with them afterwards We will call a special meeting and see how this works into our curriculum ... (how) this fits. You have to come back because teachers say, well! what do we do this for and why are we doing this?

In one school the principal selected his staff for attendance at conferences on the basis of experience. He felt that staff with less experience should have more exposure and, consequently, these members had priority. In another school, the opposite practice seemed to be preferred, but less experienced staff were not excluded. A principal commented.

There has to be an involvement by staff, particularly the key people, and you have to be prepared to spend some money to give them release time in order to do that, plus encouragement, and you have to give them some praise.

While most principals involved their staff in professional development activities, the problem of financial resources for participation in these activities was a hindering factor. Staff rotation and partial financial

support were methods used by principals to cope with this problem. A principal who had a high level of involvement by his staff lamented the scarcity of financial resources.

It really bothers me in terms of people wanting to go and do things and I don't have the resources and ability to send them to these and when I have to say no to that, I feel frustrated about that It's a decision I have to make ..., but that's part of my job.

In addition to the mentioned types of professional development activities, teachers were involved in workshops at their schools. These were organized by teachers themselves and often run by the teachers. These after school workshops were similar to the informal types of lunch-time discussions in which principals and many teachers were engaged. At the time of the study, two schools had cooperatively planned to hold a series of such after school workshops. One of the principals of the two schools was an active participant. These workshops were of a practical nature that related to specific problems or issues teachers encountered during implementation. These collegial consultations were reported by teachers to be very helpful. Principals do participate in these sessions. The workshops were more than extensions of formal staff meetings. They dealt with concerns of a more practical nature.

Formal meetings of staff were also held as an educative process dealing with problems that arose in the implementation process. All principals, at one time or another, had these meetings. A principal's description of one of these meetings follows:

We would have quite a few meetings to talk about these things (the curriculum), and I used my resource teachers and my compensatory teacher and other teachers who had gone on P.D. sessions, to help lead these sessions. Every staff meeting we've had this year (1985), we always had some professional development with different people in these meetings.

Principals also provided individual consultations to teachers; this was a normal procedure and represented a type of inservicing. The curriculum consultant was also active in this process working with individual teachers, as well as with groups of teachers. A principal has already described how he made use of the expertise of the consultant. A teacher recounted the activity of a consultant in the professional development process.

We have a English Language Arts consultant who sort of ties things together. He visits everybody's classroom, and he knows what's going on and he does a lot of directing too ...; he's real good at that.

This feeling was expressed by other teachers as well.

Individual consultation by the principals with their staff varied according to the type of problem or issue. Consultation varied from simple suggestions about a

strategy or resource to more detailed planning. A principal described the process.

I am heavily interested in integrating the Social Studies and the English Language Arts. We have developed some of the units already on an integrated basis. One of my teachers and I have sat down and integrated one of the units on the North, the Near North and the Far North in the Grade 5 program. And all this was for the English Language Arts. Wherever there was English Language Arts and Social Studies allocated on the time table, all that was part of the same thing. Art was integrated into that as well.

Numerous other examples of similar types of activities by other principals could be cited. But while some principals worked on practical classroom types of problems with individual teachers, one or two principals who worked with their staff on an individual basis, focused as well on the philosophical foundations of the innovative curricula to "'keep them [i.e. the teachers] thinking critically about what they're doing rather than content.'"

For some of these principals, content did not appear to be problematic with their staff. Principals felt that if the underlying intents of the innovative curricula were firmly conceptualized by teachers, then, the content would follow naturally. Without this conceptualization by the teachers of the intents of the new curricula, surface implementation would result and the innovative curricula would really not be implemented as intended, hence the

emphasis as expressed by the principals above.

Another type of professional development activity (though limited to fewer staff) in which some teachers engaged, involved working with colleagues within the division. Principals, as well as teachers from this school division, participated in various divisional and provincial committees struck for the purpose of assisting with the implementation of the innovative curricula. Both teachers and principals who participated in these committees reported that the experiences gained were very helpful not only to themselves, but for their colleagues as well, to whom they passed on some of the experiences gained in these committees.

Summary

The introduction of the new curricula into schools must be accompanied by professional development activities if the innovation is to have a successful implementation. The literature is very supportive of the above statement. The principal, as a middle manager in the education system has been identified as the key person responsible for facilitating professional development activities for his staff at the building level.

In this study, it was found that principals worked directly and indirectly with staff in providing

professional development for the implementation of the innovative curricula. Principals believed that it was their responsibility to provide or facilitate such activities. All principals were active, though in varying degrees, in such professional development activities. Most participated alongside their staff in many of these activities. It appears that this strategy resulted in a better and deeper implementation. Where principals lacked the expertise, they had recourse to divisional or departmental consultants, but very often as well, key people on their staffs.

Teachers themselves participated in numerous types of professional development activities: departmental/divisional inservices, reading the new curriculum guides, professional literature, taking university courses, attending conferences or organizing workshops themselves, very often at personal cost to the teacher. Teachers showed a remarkable sense of efficacy and fidelity to duty; an observation frequently commented upon by their principals. This seemed consistent with teachers' views about curriculum. While many of the professional development activities were insightful, teachers found that those that dealt with practical classroom types of problems over an extended period were most helpful as implementation progressed. This statement by teachers was

consistent with what has been reported in the research literature, for example, Rubin (1987). Individual consultations and discussions with principals, consultants and other staff members were also found to be very helpful to the implementation process. Principals were aware of these factors and most of them were very active with their staffs in providing such services. The participation of principals and their staffs in professional development activities that related directly to the problems of implementation in practical classroom situations, when combined with the theoretical underpinnings subsumed in the innovative curricula, appeared to have a positive impact upon the level of implementation, notwithstanding the difficulty of financial resources and the sometimes inadequate structure. The professional development activities of staff were viewed on the staff development profile as mainly "bottom-up," an indication of the social climate operating in these schools.

Principals and the Process of Implementation of Innovative Curricula

Instructional Leadership

Much of the literature on the principalship shows the principal to be more of a manager than an instructional

leader. Recent studies, however, have led to a reconceptualization of the principalship. The study by Hallinger and Murphy (1985) is one of the more recent studies that shows the principal as an instructional leader. Findings in the study by this researcher support the observations of Hallinger and Murphy. About half of the principals sampled in this study, spent more than fifty percent of their time on instructional matters. The rest of the principals demonstrated instructional leadership to some extent. Half of the principals sampled taught half-time and engaged in managerial responsibilities during the other half of the time. When the time involved in classroom supervision and other curricula matters is added, the teaching principals were observed to be spending more than half of their in-school time in curricular matters. One principal who said he didn't see himself "as spending a lot of time on curriculum implementation other than implementing the curriculum" that he taught as a teacher, felt that part of his administrative duties involved curriculum implementation. "'You're implementing and evaluating curriculum, and evaluating is part of implementing. Yes (in) evaluating teachers, (and) evaluating children, you are implementing curriculum.'"

Because of the massive amounts of curricula coming

into the schools, non-teaching principals stated they had been spending more and more of their time on curricular matters, facilitating or providing instructional leadership. All principals sampled said that their major role was that of a facilitator. Four principals thought that in addition to facilitating, they were also instructional leaders in their schools. Their descriptions of the activities they were involved with seemed to bear this out. While providing leadership, or facilitating the implementation process, principals were also very conscious of their managerial and other administrative responsibilities in the school. This point will be discussed further in the next section that deals with principals' managerial behavior. Principals' instructional leadership will be examined here in more detail. Descriptions of principals who show instructional leadership will be presented and analyzed.

The following description is made by the principal quoted above (p. 260). This principal taught half-time and considered himself as a facilitator. He did not see himself as an instructional leader. He thought that his administrative role "has to come pretty high on (his) priority list," because "people (i.e. the public) have to have confidence in (him)." This principal frankly stated, "I do not see myself as a leader, and I know that other

administrators do not see me as a leader either'"

The principal felt that teaching half-time "interferes with a certain amount of (his) input into what teachers are doing". This is how he viewed his instructional input.

I am perhaps a facilitator and an encourager more than an implementor. Now that can be a form of implementation too. You make it attractive for them (i.e. teachers). That's kind of where I sit, not being able to be in the classroom (i.e. not having the time to go into teachers' classrooms). I teach (Grades) 3,4 and 5 Arithmetic in the morning, and I'm in the classroom all morning. Now most of our English Language Arts and Arithmetic are in the morning; so, I do not sit looking over teachers' shoulders saying, 'What are you doing?' I have to deal with them; I have to make it possible for them to attend workshops and encourage them to go and see what somebody else is doing. If I hear of something, and I think that somebody else has a good idea that is going well somewhere else, then I might encourage that.

I think that probably my role is to facilitate or to make it possible for them to be able to implement, acting as a facilitator. If they (teachers) say, 'Hey! I can't do this, unless I have these things,' then it is my job to see if I can get those for them - whether it be materials, changes in the building or whatever hardware or better duplicating material and that sort of thing.

As a facilitator, I think rather than imposing, I make it, so that they decide. I do my best to see if they can get it. That's one of my roles, I believe. Another one (role) is to encourage them (teachers) even if they say they can't see the whole program (i.e. the holistic program) - 'I can't see myself implementing that, not the way I teach'. But, I say, yes! you are doing these things that are part of the new curriculum. When you expand on that

a couple of more times, you will be almost fully involved in the curriculum, even though you didn't set out to do that. You are adapting parts of that new curriculum.

This is the kind of thing that I think is part of my role. It is to help them (teachers) see, that really they are involved in (implementing) the new curriculum, encouraging them to go in the right direction, encouraging them to make changes. I guess that's leadership.

The above description does indicate involvement by the principal in the curriculum implementation process. Apart from his own teaching, the types of involvement with instructional staff is through the provision of encouragement and advice to teachers, arranging inservices, and securing resources. Teachers are mainly left on their own to implement the curriculum, receiving help and encouragement from their principal when difficulties are encountered. Such assistance, apart from providing resources, is more of a psychological or indirect nature. This course of action stems from two main factors: the lack of time due to the teaching duties of the principal, and the confidence this principal has in his staff. The principal stated, and the teacher concurred, that this school due to its small size had a very cohesive staff that operated in a congenial, friendly and cooperative environment. This school operated in a lower income environment. Staff were very conscious of this factor, and worked cooperatively to

enhance the quality of education in this section of town. Teachers and the principal appeared to have a "vision" of what they wanted for their pupils. The principal's remark about his administrative role and the people having confidence in him were part of this consciousness. His concern about being "visible" to parents appeared to have built up school and community relations, which contributed tremendously to a positive school climate, and teachers' sense of efficacy. The sampled teacher commented:

We are lucky to have Mr. Percell [name changed] as our principal Our staff here is competent. We are a very small staff and we are a very closely knit group I have heard from other people who have visited out school, (that) we are all like one big happy family If we have a problem, we share; if we have a laugh, we share that too. That's what makes it so nice. I am just pleased with the way things have operated in this school. We may not be doing everything that everyone else is doing. We may be doing it slower, but we are doing a good job of it. I wouldn't trade here for any school in Prairie. And when parents back you like the way they support you here, it really means a lot; so much, that I just wouldn't move.

The social environment appeared to strongly influence the actions of both the principal and teachers in this school. Wirt (1976) discussed the limitations of the social environment upon principals' instructional flexibility. He argued that parent pressures and minority populations influence principals' instructional acti-

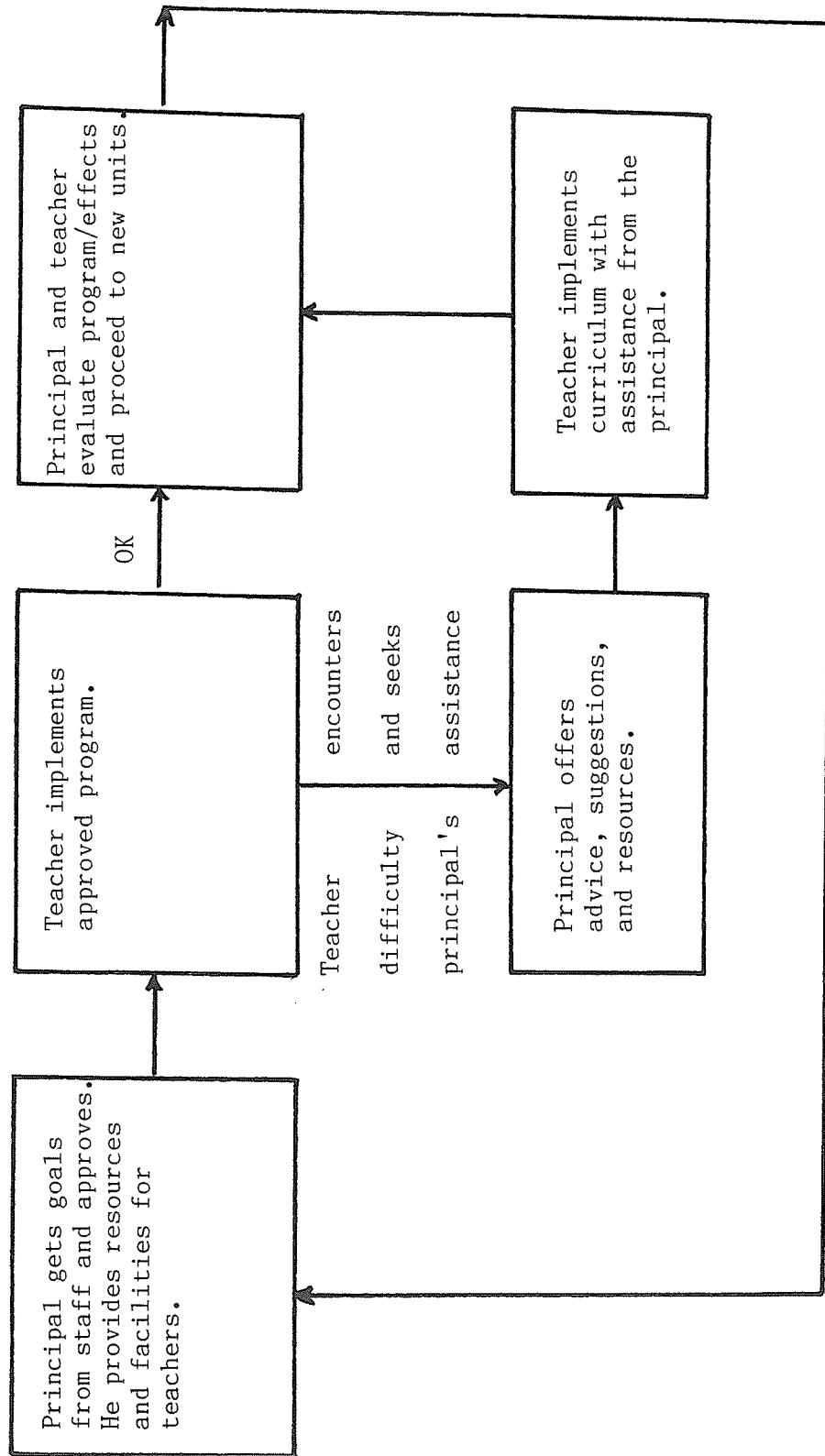
vities. On the surface, this principal appeared not to be too heavily involved in instructional leadership with his staff, but in fact, through his managerial duties, he appeared more involved than he claimed.

We sit down and look at the end product together. We sit down occasionally, and say 'where are we with these people. We have some students who are succeeding and some who are not,' we say, 'okay, what is it that's making these children succeed, or what's interfering with these that are not succeeding'. Is it the new approach or would they have not succeeded with the old approach either or whatever? Basically, it is a kind of evaluative thing.

It is through the evaluative and managerial process that the above principal demonstrated some aspect of instructional leadership. Figure 20 shows the nature of his involvement. This principal, as well as his teaching colleagues, would probably be more involved in instructional leadership if more time were available for this purpose. This researcher has the feeling, however, that this principal is more of a managerial person than a curriculum person. The principal's comment observed above appear to reflect this perspective. Other teaching principals in the division faced the same difficulty as the one above. The time component for more direct involvement in the curriculum implementation process is restrictive. The type of behavior exhibited by these teaching principals appeared to be a function of the type

FIGURE 20.

Principal's Involvement in the Curriculum Implementation Process



of environment in which they operated. Research on organizations and on the principalship suggests that these environmental factors do impact upon principals' behaviors (Hallinger and Murphy, 1985; Salley, McPherson and Baehr, 1979). Another principal commented on his involvement in instructional leadership. This principal is involved in full-time administration.

I think, I'm more of a facilitator. I try to be a leader as much as I can at times when I see something that I think is worth pursuing and pushing. Sometimes, I have to play back and hope that teachers will catch on. You do things to bring something in, and when you get any opposition, you try a different way rather than just letting back.

This principal is involved, like most of his colleagues just mentioned, more from a managerial perspective. He facilitates, rather than leads. Another teaching principal said that he tries "to get into the classroom half an hour a day but even that is difficult" and other than his "own direct teaching, the percentage (of time involved in instructional leadership) is very small". The teacher sampled in this school, said that this principal

really cares and is really interested in curriculum implementation and he has done a lot of talking with us about how we're using the curriculum guides and asking where we need help and arranging it.

This was a first year principal whose concern for the "first year was simply to get the facility things, and

equipment things around to (his) liking," so that he can start in the second year, "looking at programs." At the time, he thought that he was more of a facilitator and would be taking more of a leadership role later on. This principal is operating more from a facilitative or managerial perspective rather than a leadership one. It is the feeling of this writer (from personal observations and statements made by the principal and teacher) that this principal would become more involved in instructional leadership as he settled into his principalship. This principal felt that the curriculum should be implemented as designed. His leadership role would probably lean more towards the managerial perspective, but very likely without the rationalistic overtone.

Another teaching principal made essentially the same comments as his other teaching colleagues. This principal described his instructional leadership role from the perspective of a facilitator.

I guess I would look like a facilitator. My immersion is probably limited and I think a lot of that is because of the nature of my position. Since I am a teacher myself, then my administrative time is limited. I teach half-time, so I don't have as much time to do things I like to do. I think it's more effective making it possible for other people to do it and then I become involved where-ever possible. I believe strongly in the immersion of the principal in parts of the curriculum. It doesn't have to be the

whole thing, but, in bits and pieces of the curriculum.

Because of the environmental and contextual situations constraining them, a strategy utilized by these teaching principals was to identify key people including consultants, to help facilitate the implementation process. One of the teaching principals quite frankly stated, "I couldn't do all this implementing myself". He called upon the resources available to him for assistance. "I will call a facilitator (consultant), making it happen without thinking I have to do it all by myself." This principal felt that curriculum implementation was his job and that he needed "to be involved in it." He further said, "I feel I am heavily involved." As chairperson of the divisional computer committee, and with his participation in the provincial Mathematics committee, this principal felt that his involvement in the classroom would help speed up the curriculum implementation process. "I am spending a fair amount of time in the classroom seeing what teachers are doing and doing a little bit of teaching at the Grade 2 level in Computer Awareness." The principal felt that time restrictions inhibited his involvement. "I feel I need to be involved, even more involved in the classrooms than I am now. There are certain time restrictions that

make it difficult.'"

Like one of the previous principals already discussed, this principal felt that his "supervision of teachers is tied closely to the implementation." He thought of himself both as a facilitator and as an instructional leader.

Instructional leadership is the important thing. The facilitator also is important to a certain extent. Maybe in the Language Arts, I have not been a facilitator, I've been maybe more of a leader there. I am much more a facilitator in the Computer Awareness program. I've done a lot of numerous sessions for teachers with the computer. I've spent many hours on that. So, depending on the areas of expertise, I guess I am both a facilitator and instructional leader.

The statements of the above principal corroborated with the observations of the sampled teacher. This principal taught, but was also involved with facilitating the implementation process in areas where he lacked expertise. He provided instructional leadership in those areas where he felt he was competent to do so. This principal has found the time, notwithstanding his teaching and other administrative duties, to demonstrate instructional leadership, as well make provision for implementing the innovative curricula. He was, at the same time, conscious of his administrative duties which were tied in to implementation. The teacher mentioned above noted, "'If he (principal) sees that things are

slack, and that you're not getting into the curriculum, he really does his best ... to bring it in.'" This principal, according to Hord and Hall's (1987) definition is an "initiator." He is proactive; he monitors, seeks resources and training for his staff, administers and teaches, as well as providing instructional direction. He is interested in his administrative duties, in the innovative curricula, and is heavily involved in the implementation process. He appeared to be more involved in the deeper aspect of curriculum implementation.

Like the principal mentioned immediately above, there is a group of principals who were very actively involved more directly in the curriculum implementation process. These principals are mainly administrative principals; that is, they are non-teaching principals and, therefore, devoted considerable more time to actual curriculum implementation than the teaching principals. One of the principals in this group saw himself "as a facilitator, making sure teachers can do what they set out to do." He ensured that teachers "got the equipment and materials and funds," in order that they can implement the programs. This principal thought that he was somewhat involved in leadership. He claimed to "sow a lot of seeds and then sit back and watch them grow" in a facilitative sort of way. He admitted to spending about 50% of his

time directly in curriculum implementation.

I will meet with them as a group and we'll look at some aspect of the program. If they are concerned about something and want a meeting about it, we can bring in somebody more keyed into what's happening in an area (i.e. the curriculum). We'll do that too.

This principal does the usual facilitative things to get the teachers on the implementation track. He read, monitored, got resources, got in the consultants and provided inservices relevant to specific problems in the implementation process. He observed, and attempted to change the philosophical orientation, and ways of thinking of his staff in order to facilitate the implementation, but allowed his teachers to do the main implementation.

I have been allowing them, pretty well, to work at their own pace here, and at the same time, trying to keep a handle on the fact that the Primary people are doing more or less the same thing at the same time. Then, ensuring there is some feedback from one group to the other so the Intermediate knows what's happening in the Primary and how extensively they're changing or whatever they're doing. This is much more critical in terms of the English Language Arts than it is in the Social Studies (for reasons already discussed viz. the philosophical orientation and the structure of the curriculum).

In addition to the facilitative processes, this principal appeared to be actively involved in monitoring the implementation of new curricula in order to ensure continuity between the grades and a more "accessible"

curriculum for his pupils. The teacher interviewed described this process.

Within the school, we get together as a small group and discuss implementing as to what the other person (grade) is doing, and we also do some planning so we can build into a sequential manner.

The description of his involvement in the curriculum implementation process posited this principal more as a facilitator than an instructional leader. The principal thought of himself as a facilitator, but also thought that he demonstrated instructional leadership at times. It is the feeling of this researcher that such leadership is more of a managerial perspective. This is explained through the nature of this school, having pupils with a variety of different types of needs. Contextual and environmental variables helped to determine the principal's implementation behavior in this school. According to Hallinger and Murphy (1985), Salley et al. (1979), this principal is a captive of his environment; his behavior is a function of environmental and contextual factors. This principal, in getting his staff to modify their philosophical orientation, in providing the necessary tools for implementation, and in monitoring the same was attempting to affect a deeper level of implementation. This writer has the feeling that there is some deep implementation taking place in the school. With

more involvement in instructional leadership by this principal, deeper levels of implementation could be expected to be the norm in his school.

While all the principals sampled described themselves as facilitators, four of the principals through the description of their activities appeared to be more as initiators, according to Hord and Hall's (1987) conceptualization, or as effective principals according to Leithwood and Montgomery's conceptualization. This group of principals also fitted Hallinger and Murphy's (1985) description as instructional leaders. The following descriptions further outline the activities of this group of principals.

In describing the involvement of her principal in the curriculum implementation process, a sampled teacher thought "he is a leader". She further reiterated,

it helps that you have a principal who is in support of what you're doing and is aware of what is happening. He (the principal) is knowledgeable and is prepared to spend money on a particular area; area; it moves the school much quicker. He is a leader.

This principal had some very strong feelings about instructional leadership. He felt that principals, as administrators, were at a disadvantage, if they lacked a good background in the English Language Arts as this was the core of the school's program. He felt that an

instructional leader must be able to take a "class and do a really super job with it, and have the teacher respect you as a teacher and as an administrator." He felt that good judgement on teaching was essential. "You have to try and lead them to discover why some of these things are better, and are better for the pupils to do it that way." The principal felt that many problems in schools are created when "principals are not on top of things, and that's another reason why the administrator must be an instructional leader." This principal felt that administrators who were "not aware of what's going on out there, are not of very much use to their teachers." He continues.

To me, in an elementary school, it is so important that you know what's happening in the process, and how children learn. I can be a good administrator and get the teachers all these things, and all these materials, and all that, but if I really don't know what's going on, I can't evaluate that. I can't make any judgments about what their teaching is like, and that sort of thing. I am, therefore, not an instructional leader then.

This principal has been very much involved in the curriculum process and in professional organizations. He has been involved directly in the implementation process and in instructional leadership from the very beginning, even before the innovative curricula were introduced into the schools. The principal's actions were congruent with

what he said and how he felt about curriculum. He had defined the school's mission; he had presented his staff with a vision of what they should be trying to accomplish in their pupils. He had communicated this vision and the goals he wanted his staff to implement. These characteristics have been defined in the school effects research as contributing factors towards effective schools. This principal appeared to be displaying these attributes. His teachers appeared to support what he said. The following description by the principal outlines his involvement and leadership in the curriculum implementation process. This principal demonstrated "effective leadership" as described by Leithwood and Montgomery (1982). He is an "initiator" according to Hord and Hall (1987). The following statement by the principal provides support for the above conclusion.

In terms of our school, it meant getting the materials; getting the curriculum guides from the Department; looking at those; getting time to visit other schools; getting people in for professional development days ... then taking a look at where we are Going through some exercises in our school in terms of trying to explain to teachers that there is a need for change from the skill oriented model to a more child-centered model Making my objectives known to teachers, and in that process do not underevaluate what teachers have done in the past. We went through all those sorts of things. We met as a staff, and I went through some things in terms of a skill model that we were doing with pupils, and teachers saw how that wasn't really working, for example, comprehension.

I gave teachers a page of material that would be written at the secondary level that would be difficult for them to read. It was full of terminology that they didn't understand; they didn't know the vocabulary. So I gave them that; they read it, and I gave a series of questions on it. They were able to answer all the questions and I said to them, 'You have 100% comprehension, now what did you read in that thing'. 'Well, I don't know what I read,' and I gave them a vocabulary list of what was in there. 'Oh! I understand what it is about now.' So this is what we do with children. We give them a sheet of exercise from a passage they have read and answered all the questions; they get them right. So the child is comprehending well; 96% in comprehension, but the child still does not know what he has read. We went through that, and that was one way of showing teachers what we were doing with children. I gave the teachers a copy of my objectives in terms what I thought was the Language Arts program I dealt with the listening, speaking, reading writing, all those aspects, grammar and integration, all those things; so they have all that there. Following that, I felt that a number of teachers had gone to these P.D. things that I talked about. They visited other schools and they were coming back with little bags of tricks and they were going to their classrooms and were doing these neat wonderful things. They were not able to explain to me why they were doing them. So we sat down then in the Fall and I went through the strands of the Language Arts program as outlined by the curriculum guide and we talked about those and the objectives that were laid out to achieve those strands. Then, I presented them with a cyclical model of good instruction where a child comes in with some kind of entering behavior and the teacher looks at that behavior and sets instructional objectives to meet that behavior, and then set instructional procedures to achieve those objectives, and then they do the evaluation. So there were four things in that cycle that were continuous and all interrelated. From that model, we drew up a unit plan that

had major goals for the unit. There were your instructional objectives, down this side for your content, your instructional procedures and then your resources, and then at the bottom, your evaluation. So I said to all the teachers, 'This year, what I want you to do, is that I want at least one unit from every teacher.' Also during this process, I said to them, 'Let's not go too fast, if you get in too quickly, you're going to get bogged down.' They didn't take that advice; everybody jumped right in, right into the deep end, and it's just taken off really in this school. Maybe there is another thing I should mention. I'm a kind of person that likes continuity in my program and around the school. I don't like one person doing this and another one doing that and somebody else is doing some thing different. The pupils have to move to these teachers people from time to time; sometimes children aren't ready for all that if it's a wide kind of varied thing. Therefore, we have to build that kind of continuity into it.

This principal is obviously involved in instructional leadership and in deeper curriculum implementation. He is concerned that his teachers understand the deeper intents of the curriculum not only its mechanistic framework. He is concerned that his teachers understand how and why, not only what their pupils learn. He is interested in the ability of his staff to accommodate varying entry behaviors of their pupils and deal with these through the curriculum. This principal is concerned not only with the surface level behaviors of his pupils and staff, but what the behaviors represent as well. He is concerned about his teachers' ability to "unpack" the curriculum and make

it "accessible" for children with varying abilities. The principal uses a variety of strategies for developing these qualities in his staff for example, through a simulation exercise with them. This exercise created the reflectivity necessary for understanding the change. Through the activities of modeling, planning and monitoring with his staff, this principal displayed an understanding of deeper curriculum implementation. Monitoring by the principal for continuity from grade to grade does not mean reverting to a "linear" instructional mode, but assuring that the curriculum is "unpacked" and is accessible for pupils. Bussis et al. (1976) described this process of unpacking quite well.

At a subtle level are decisions regarding the maintenance of learning when children need help. They may need help in making connections to previous learning, in seeing implications for a future activity, in sorting out critical feedback and extracting meaning from certain situations. Some may need considerable help in getting settled down and involved in the first place. The task of encouraging and guiding children's learning entails key decisions as to whether, when, how, and for what purpose to intervene in a child's activity. These decisions cannot be made by a textbook or teaching manual, although books and manuals have useful suggestions. Ultimately, they are decisions that can be made only by an adult who assumes responsibility for learning of individual children (p. 25).

This principal is concerned that his staff are capable of making those meaningful decisions in the process of

implementing the innovative curricula for the benefits of pupils. As such, this principal displayed a high level of instructional leadership in the curriculum implementation process.

Another principal who served in the principalship for about twenty-five years was just as concerned as the principal above, about curriculum and the instructional leadership he was expected to display. This principal was interested in getting into the deeper aspects of curriculum. He outlined a number of curricular concerns that he was attempting to have his staff examine, such as meeting the needs of students, better testing skills for his staff, better utilization of library periods, how and why children learn and what is an effective teacher.

This principal described himself more as a facilitator than a leader, and rationalized that being a facilitator was necessary, as the staff needed to see what he had to offer before he assumed a leadership role. In fact, the actions of this principal posited him more in the position of an instructional leader. His reorganization of the library, to reflect the intents of the new English Language Arts curriculum was typical of some of the actions and interventions taken to expedite the curriculum implementation process. He stated,

I had a parent volunteer come in and say

how pleased she was with the books that are in the library this year, and the way that I've encouraged children to read them.

The involvement of this principal in demonstrating instructional leadership has been a major focus for him.

He commented:

With my staff we've looked at particular aspects of creative work. I've marked papers for at least four teachers. I have taken the whole class set (of readers) and I've evaluated those. At the end, I've written them (teachers) a report saying, 'Here are the strengths as I see them; here are the concerns; let's teach, be it sentence structure or whatever.' One thing my Grade 3 teacher worked on was the use of quotation marks. They're a great class ... they love it, and they wrote story after story. That was because we looked at it in there (i.e. in their stories).

Another type of instructional intervention by the principal, in demonstrating a process for implementing the new curricula, involved the search and reorganization of resources for his staff and pupils. He described this as a "growing process" with his teachers. He further commented,

In this school, I'm still going through a growing process with my teachers. What I've done with my Grade 5's is that I went through the entire unit 2 in the Grade 5 curriculum guide, and listed all the resources I could find. I went to the library and listed all the books available. I listed all the filmstrips and so on. In other words, I made it my objective for that unit to say to my staff, 'Here is what we have in our school. Now what

can we do with it?' The other thing I have encouraged, is that one person in particular has gone down to the agricultural centre, and picked up countless pamphlets on farming, agriculture, and is using that. We have gone and picked up road maps. Most places are very cooperative; they'll give us three to five samples or more. We've done that and as a result, our kids are put into group work and we are working through those steps which is great. I feel it's reading, it's research, all combined with a meaningful purpose.

This principal was demonstrating instructional leadership in a practical eclectic manner for his staff, and he expected that his staff would follow his lead for his instructional intervention was made with a "meaningful purpose" for the pupils. This principal stated that "we need to look at how people interact , think, respond, agree, disagree, and why." He felt that instruction should be geared "to meet the needs of children." He demonstrated how he accomplished this with his staff in the English Language Arts Reading area, with three different levels of reading material. He claimed to be successful in encouraging two more teachers to experiment with his instructional technique. He thought that while this instructional mode was "more demanding" on the staff, "it's more profitable for the students to get those needs met." This principal also spent considerable time in acquiring and allocating resources, attending meetings, improving staff quality without causing conflicts, observing classroom interaction and

instructing as well. Moreover, he was aware of students' learning problems vis a vis the new curricula, and had demonstrated for his staff how some of these problems could be alleviated. This principal, however, appeared to be a strong managerial person, but without the rationalistic overtone. His school had an air of collegiality and a climate conducive to teaching and learning. During the interview, children were observed coming happily and freely into the principal's office with their written work for the principal to read. They appeared happy with the principal's responses. This principal must be doing something positive in his school. The data appears to indicate that the principal demonstrated instructional leadership with the new curricula.

The following is another principal who showed strong programmatic and instructional leadership. This principal managed a large school with Primary and Junior High Grades, as well as a strong bilingual program. He is a full-time administrator who has a considerable number of years of experience as a principal. He was a curriculum coordinator sometime in the past and has done graduate work at the university level. Statements made by this principal appear to highlight him as a very strong instructional leader who knew his staff, knew his pupils,

and knew what the innovative curricula demanded. Moreover, he knew what his position demanded and particularly, what he had to do to get the program implemented. He was fully aware of the limitations and problems which faced him.

This principal thought that his training in curriculum, and his background and experience put him in an advantageous position for instructional leadership and implementation of the innovative curricula. He felt that involvement in the curriculum implementation process depended upon the individual.

I think this is a very individual kind of thing. For me, it happens to be my area of specialization. I had been curriculum development officer for the school division ... and that's where I have my post-graduate training. So that's the area that's most important, and I suppose that's the reason why I'm probably more involved in it, and I know some of the other principals are too. It depends on your own training and your own background. I'm less involved with the fine adjustments of budget which may be the thing that most interests the neighboring principals for instance.

Personal factors about principals as influencing instructional behavior has been mentioned in the research literature by Hallinger and Murphy (1985). The above principal has stated that personal factors about himself have contributed to the type of interventions made by him. Hallinger and Murphy suggested in their research that this variable may interact with other variables

to affect implementation.

However, even with training in the field, and a background in curriculum, this principal had to embark on further professional development in order to comprehend some of the innovative curricula. He felt, that if he was experiencing difficulty in comprehending the English Language Arts curriculum with his background, then, so must his staff - a correct diagnosis on his part. The intervention strategy utilized by this principal with his staff in comprehending the curricula was described in Chapter 5 (See Figure 12). It was a strategy, similarly utilized by one or two other principals. This was one of the first steps in a series of interventions made by the principal in the curriculum implementation process. The principal described this process.

We went through one of the exercises to convince ourselves of the rationale. The program was to take a book, one of the Language Arts books, one recommended for the curriculum. We each bought a copy of that. We divided it into sections and we spent four or five noon hours discussing each section. We would preread and make notes on this and compare and talk about it in terms of our own experiences and styles. That's probably one of the most useful exercises that we did

Having conceptualized the intents of the curriculum for his staff, the principal proceeded to a second phase of intervention, where small sections of the curriculum were taken and changes worked upon. These activities were

finally brought together by the principal and his staff, and integrated into a meaningful whole for the staff but more so, for the pupils.

We sat down in area groups, Primary area, Intermediate area, and worked out fairly specific kinds of small changes with the Language Arts which is a big thing. We got together as a whole staff. Each area brought in their suggestions as to what they were doing, or going to do. Then we had a session where we all sat down and compared each other's activities, and agreed or disagreed, and tried to get things together, so that we wouldn't be working at odds with the other area. That's a very, very, useful exercise, a very important exercise.

In order to undertake the above activities, the principal built a climate conducive to group work that promoted the change process. He felt that the social dynamics in his school encouraged cooperative endeavours. Teachers' sense of efficacy was high. He felt that many changes undertaken "may depend to a degree just on the dynamics that are in the school and in personnel ... how much interaction, enthusiasm there is for change" and on how perceptive the principal was in nurturing and looking at the social dynamics and tapping that.

This principal also demonstrated instructional leadership through cooperative instruction with a number of his teachers. The following vignette is a description of one of the interventions.

I timetabled a block of time for all who would

be taking Language Arts at the same time in a cycle. Then, we took all the pupils and divided them into age and grade lines. We then divided them into smaller groups and both the vice-principal and myself would take a group. We had some guests like our Language Arts Coordinator take a group. We would run three week sessions dealing with topics which were very interesting to the people involved. For example, the Language Arts Coordinator did a 3 week session on book binding or book making. The vice-principal did several sub-sections on library use, as she was a trained librarian. So, that was very down to earth. And myself, I did some writing and note taking kind of activities. They were basically geared towards writing the whole Language Arts experience thing, with drama and poetry.

These activities were described by the sampled teacher as not only desirable with the new curricula, but very helpful to the teachers. This principal, in addition to demonstrating instructional leadership, was very active in providing facilities, resources, professional development in the school setting, as well as outside the school setting. As previously mentioned, he was interested in the curriculum, understood its intents, and went about creating the environment for ensuring the implementation of the innovative curricula. He was interested in his staff, and their perceptions and understandings of curricula intents. He was interested in his pupils and assured that the program he offered met their needs and was meaningful to their daily lives and future development. He was interested in getting the curriculum implemented in his school, as was his mandate,

but more than that, he felt that the new curricula were much more progressive and humanistic for the pupils. This principal was interested in the "deep implementation" of the innovative curricula. He was a strong instructional leader who provided the leadership for his staff. He joins those principals defined by Hord and Hall as "initiators" and by Leithwood and Montgomery as "instructional leaders." This principal, along with a number of his other colleagues, appeared to fit the mold of the reconceptualized principal. This writer believes that these principals demonstrated leadership and made interventions that are characteristic of instructional leaders as described in the literature.

Summary

In the description and analysis of principals' instructional leadership, several points have clearly emerged. One of the first observations is that all principals in this study were active in the implementation process, contrary to what the research reported about the principalship as being a more managerial type of position. The qualitative methodology employed for this research generated sufficient rich, "thick", descriptive data about the processes utilized by principals for curriculum implementation. While principals did engage in managerial behavior, a good portion of that

behavior related to curriculum implementation. Principals were curriculum implementors. The principals were all interested in and were concerned about implementing the innovative curricula. This observation appears to be consistent with principals' statements about curricula intents and their feelings about the innovative curricula. Principals, however, appeared to be grouped: firstly, on the basis of environmental and contextual factors, and secondly, on the manner in which they went about demonstrating instructional leadership.

Half of the principals in this study taught half-time and this was a constraining, contextual factor that appeared to affect instructional leadership. Teaching principals were constrained in the amount of time they devoted to instructional leadership. School environment and inschool contextual situations were also observed to affect interventions. A major variable was the time component. Because of this, more than half of the principals thought that their main interventions were as facilitators. However, one or two principals were modest in the descriptions of themselves as facilitators. Their interventions conceptualized them more as instructional leaders rather than facilitators. One principal thought that he was a facilitator in some areas and a leader in others. All principals procured resources, facilities,

professional development and attempted to create a harmonious climate for implementation. All principals utilized assistants, teachers or consultants to carry out the implementation.

Approximately half of the principals sampled were non-teaching, mainly administrative principals. This group devoted a good portion of their time to curriculum implementation. One principal summed up his time to about 50%. This group of principals demonstrated considerable amounts of instructional leadership. Most in this group, as well as principals in the teaching group, displayed interventions that had meaningful purpose for staff and pupils. It was suggested that deep curriculum implementation was taking place in the division; some surface implementation took place as well. This observation is consistent with what principals and teachers said about curriculum in Chapter 5. It was also observed that some principals, even though allowing considerable flexibility in their staff, were prone to display behavior of a managerial nature. This did not, however, affect the climate of the schools as principals were aware of the effects of bureaucratic behavior and were careful about their relationships with their staff.

Principals' Managerial and Instructional Behavior

It was observed in earlier sections that sampled principals believed they should be highly involved in curriculum implementation. The structured observation studies cited in the literature review reported principals as spending most of their school time on managerial activities not directly related to instruction. In this study, half of the principals taught, so, at least 50% of their time were directly related to instruction and implementation but in the role as teachers. It was observed also that these teaching principals directly and indirectly affected instruction and implementation through their instructional management and managerial interventions such as accessing resources, or supervision instruction, or meeting with parents. Findings in this study, so far, appear to refute the conclusions from the structured observation studies as being definitive. It was observed earlier that the structured observation studies limited the acquisition of rich, "thick" data that adequately described the day to day processes principals were involved in. This study has gathered such "thick" data. The differences in the results lay in the different methodologies used in this study and in the structured observation studies.

This study does not deny that principals engaged in

other management activities not directly related to actual classroom instruction and implementation of the innovative curricula. As a matter of fact, principals did engage in such activities. In order to emphasize his administrative duties, one principal compared the difference between the nature of his administrative duties in a small school, with that of other principals in larger schools. He commented that it took the same amount of time to fill forms showing 160 students as against 380. There were management activities that were not directly related to actual implementation such as the mundane administrative tasks of filling out forms. These tasks have been well documented in the structured observation studies.

What has been less reported on are those managerial activities that have a more direct relationship to curriculum implementation. The structure of Werner's framework appears to subsume an examination of these types of managerial behaviors, organizational changes, planning and decision making strategies that impact upon curriculum implementation. This section will focus upon principals' management behaviors that relate to curriculum implementation.

Principals' instructional management behaviors and interventions in the curriculum implementation process

have been influenced by the manner in which they perceived their roles, by individual personal factors as commented upon by a principal (discussed above in this chapter), by their values and beliefs about how they perceived the teaching/learning process, and more directly through their mandate. In Chapter Four, the curriculum revision and implementation process was outlined. Principals have been mandated by the Department of Education through their school boards to ensure that the innovative curricula are implemented. It was discussed above in the section on Structure, that the division has established a model with timelines for curriculum implementation. The divisional structure reflects the goals of the school board. Principals are expected to carry out these goals through their implementation activities. Principals are normally appointed on the basis that they operationalize the values and goals of the school board.

In the case of Prairie School Division, considerable flexibility is allowed principals in the operations of their schools; however, a certain measure of compliance is expected from principals. Weick (1976, 1982) suggested that schools are loosely coupled systems, but even in such loosely coupled systems, key values are centralized and controlled, whereas other values are

allowed to be modified. The observations of Blau (1955), in the earlier section of this chapter, are recalled at this juncture. Blau observed that higher levels of efficiency are obtained when bureaucratic structures are adjusted. Principals are allowed considerable freedom in determining their own strategies for implementing the innovative curricula. Principals in this study have been mandated the implementation tasks, but also have been allowed flexibility at their building level.

Curricula change has been viewed as a complex technical, sociopolitical, multi-dimensional and multi-level process. With the massive amounts of new curricula coming into the schools, principals and teachers alike were overwhelmed. It was necessary to devise various strategies to implement these curricula. Some strategies utilized by principals have already been described and analyzed, for example, professional development and resource acquisition. The following is a description of how principals went about implementing all the curricula that came into their schools.

Curriculum Priorizing

One of the strategies that all principals used was the incremental approach to curriculum implementation. In this approach, implementation is staged over time. Implementors gradually introduce small units initially

and incrementally expand on these with additional units over a period of years, until full implementation has taken place. One of the principals commented upon this staged incremental strategy that "true implementation doesn't take place unless it goes off five years or so and actually produces a change." All principals utilized this strategy that was suggested by the Department of Education. However, not all innovative curricula received the same level of attention. Eighty percent of the principals prioritized their curricula, but the priorities varied from school to school, Health here, Social Studies there or Computers across there. The English Language Arts curriculum however, was the primary focus of most of the principals because this curriculum was perceived to be the core of the elementary school program by all principals and teachers. It was felt that the other curricula could be hinged to the Language Arts. One principal stated quite emphatically that

the Language Arts was the essence of the whole thing. For our school, my decision was that we would prioritize, and Language Arts would be the one that we would put a lot of our focus on in terms of implementation. We had implementation of Computers, Social Studies, Art, Music, Language Arts, all those have come at the same time, and Health. All those came at the same time, so, you can't do them all at once. So we just made the priority on our own. It would be Language Arts, then we would look at the others and see how they would fit into the Language Arts. And in my estimation, the

Language Arts is the essence of the school.
The reading is the essence of the whole thing.

While the English Language Arts curriculum was the main focus, attempts were made to integrate the other curricula into the Language Arts. The above principal commented again,

I am heavily interested in integrating the Social Studies and Language Arts. We have developed some of the units already on an integrated basis ... in the Grade 5 program. And Art was integrated into that as well.

The teacher interviewed concurred with the principal about the English Language Arts focus and the integrating principles. She commented:

We focused on the Language Arts through the other curricula ... through the content areas. So taking Science topics, for example, dinosaurs or plants, but using the Language Arts skills - listening, speaking, reading, writing; even through the Social Studies, for example, families, the pupils will be learning to listen, speak, read, write, about families or whatever topic is being covered.

The principal, however, admitted to having "not been too heavily involved with the new Social Studies program yet." He continued,

The Social Studies is being implemented in nearly the same kind of way that we did the Language Arts. It's not being addressed in as much detail as we have done in the Language Arts. Hopefully, that would come next year. We have had Department people here talking to teachers about the Social Studies. We've got the materials. Teachers have the document in their hands; they are

going through it, using the things that are suggested in the guides; but I don't think the kind of change has occurred nearly as much as in the Language Arts because we haven't put the same kind of emphasis. So that document and that process for Social Studies could probably just drift on and on, the same as it did before. The document is being used; the materials are being used, but I don't know if the philosophical change asked for in this document is being achieved ... so that requires more work.

This principal rationalized his comments above by emphasizing the massive amounts of curricula to be implemented and the fact that "true implementation" is staged over time - at least five years. During this time emphases are shifted back and forth.

While emphasis was placed on one curricula, the other was not neglected, but allowed to continue to "drift on" possibly without much emphasis on the new philosophy. It is very likely that teachers reverted to surface implementation where curricula were not emphasized. However, the carryover effect of the new methodology and philosophy from the Language Arts could also have operated. It will be recalled that the principal commented upon his interventions where he worked with a teacher to integrate Social Studies units with the English Language Arts. If staff truly conceptualized and utilized the new methodology in the English Language Arts, it is very likely that they similarly used this

strategy in the other curricula areas, thus, effecting the curricular intents and, hence, deeper implementation.

Principals' strategies for prioritizing the curricula appear to depend a great deal upon the contextual situation in their schools. This principal was a Language Arts specialist. He prioritized the Language Arts for implementation but went about this task by attempting to manage and direct the way his staff thought about curriculum.

In terms of our school, it meant getting the materials, getting the curriculum guides rather, from the Department, looking at those, getting time to visit other schools, getting people in for professional development days in terms of discussion of the new Language Arts program, and taking a look at where we are We sat down then, in the Fall (1984), and I went through the strands of the Language Arts program as outlined by the curriculum guide and we talked about those

Principals were aware that teachers were overwhelmed by the introduction of all the new curricula at the same time. In order for teachers to implement, they had to feel that they had some control over what they did. Principals accomplished this through a variety of strategies using their managerial skills and abilities. The following principal described how he accomplished this task.

Teachers knew that there were a lot of new curriculum coming in and they said we've

got a lot of work to do. How can we do all these at the same time? You know, teachers are not going to accept these kinds of changes to which they are not committed. So, we have to give them time to assimilate all this kind of information and do something about it. So, I guess, it came from their discussion that I said, let's make Language Arts our priority, and I think they would grab at that sort of thing, especially when they knew all the other things were coming. I think they were also more ready for this kind of program too.

Other principals appeared to have had similar types of experiences with all the new curricula coming into their schools, though some variations in curricula use were observed. One of the teaching principals stated that his strategy depended upon his contextual situation.

How you prioritize is difficult ... because it is related in many cases to where we are; perhaps, where I think we are falling behind; where we have to move ahead; where I have support; where I don't have support, and so on The biggest problem is just like being a juggler. You juggle all these things and try to keep them (the curricula) up A lot ... hinges on the staff you've got Our priority right now is the Language Arts. Also, at the same time, we are implementing the Art curriculum We are lax in the Health; we are just getting started to go at the Computer. Math has been left aside for too many years. Next year, we're putting a strong push on improving our Math. Social Studies is probably still intact; the danger is that we might let it slip and a year from now, we'll have to put the emphasis on Social Studies.

The impression of this researcher is that this principal was struggling to keep pace with all the new curricula in

his school. His main strategy in prioritizing these curricula depended upon his contextual situation for all the curricula other than the Language Arts. The Language Arts was a division priority, so all the schools focused on that curricula. The value expressed by the Central Administration appears to have influenced the way in which principals prioritized the curricula. Weick's (1976, 1982) observation pointed out earlier is recalled at this juncture. March and Simon, (1958) in their book Organizations, discussed this idea whereby higher levels of management place constraints on lower levels. Thompson (1967), took March and Simon's idea and explored it further. Thompson referred to this type of control as the "core technology" of organizations. In this case, the core technology is the implementation of an innovative curricula that was considered to be the core of the school program. Bossert et al. (1982), have reported that this concept of higher levels of management constraining lower levels has recently appeared in organizational analysis of schools under the concept of "multi-level perspective." The critical component in this case was that decisions at the middle and lower levels were a function of decisions at a higher level, namely, at the Superintendency and School Board levels. The contextual situation as well, do have a major impact. Another

principal commented upon the influence of central policies and of his perceptions in setting his priorities.

The division has certain coordinators for Computers and for Language Arts. I guess, I would focus on those where we have somebody at the division office helping us with that. I feel, first of all, it's the principal's duty to assess the needs that are in the school, to discuss that with the staff, and then set priorities for the year. Now our priorities for this year have been to work on the Language Arts. We've put a lot of emphasis on that area. I want to move a little in the Health next year, but we need a little more work on the Language Arts. So, I expect that will continue So, the principal's job, role, I think I should say, is to define the needs of the school and then work at that.

In addition to contextual situations, personal factors, such as beliefs, influenced the way principals prioritized the curricula. This observation is also applicable to teachers. The teacher in the school with the above mentioned principal, described the way she went about prioritizing curricula for herself.

I select sections, especially in Science. In the Language Arts, I try to get through it all. I do select in the Social Studies. I select things that I can teach best, that I have the most resources on, that I am most familiar with.

In another school, the situation was basically the same. The principal here, felt that "too much" curricula were introduced "all at once" and that it was "a little bit unjust to expect teachers to jump right into about

five new curricula." He didn't "think that teachers can do that." He felt that they had "no option" because "that's mandated" (i.e. the implementation of the new curricula). So then, how did this principal go about prioritizing? He stated:

It's a matter of looking at your resources, before saying, we're going to go full speed into the Language Arts. Now, before we do that, we need this, this, and this. And we don't have this. So, let's do one that we're more or less equipped to handle right now. In this case that was Social Studies, because we did have a lot of materials and we were using a multi-text approach to do a lot of things anyway, and that wasn't hard to do. We grabbed the Social Studies curriculum first, and decided to concentrate on just one area in a year, rather than try to do two things. (This is because) teachers are pretty busy, and shy away from getting involved in too much that is new at one time. It seemed that the Social Studies was a less threatening subject to get into than the Whole Language concept, which is completely foreign to a lot of teachers, especially those who are hung up on grammar and basal readers Social Studies was less threatening. It still required some texts, but they were not used the same way.

This principal commented that teachers did their own prioritizing in the classroom as well.

In terms of what actually happens in the classroom ... teachers would tend to prioritize Language Arts before Art, and it's quite obvious that this is what happens, and what is happening. (Here), the Art curriculum has not taken hold at all This year (1985) we decided, as a group, to really move in the Language Arts. All our energies have gone into trying to improve the Language Arts program. That was a collective decision, but the seeds came from me. I sort of fed them materials

on the Language Arts for the last two years saying, we've got to move; we've got to move ... so, this year we decided this was it.

This principal saw his staff overwhelmed by the new curricula and thought that they would have difficulty in accommodating to the changes. His strategy was to select a curriculum that would be least resisted by his staff, and then gradually move into the more difficult area that required a more radical shift from current practices. This principal gradually developed and nurtured a "climate" that was conducive to the change efforts. His assumption was that once a positive feeling of involvement in the change process was developed, further commitment would increase the success of the entire innovative curricula. His inclusion of his staff in the decision making process helped increase the success of the implementation efforts. This notion of "climate" in the change process has been dealt with in the literature on change and on curriculum implementation. See for example, House, (1974); Berman and McLaughlin, (1976); Sarason, (1971); Baldrige and Deal, (1975); and Bossert et al. (1982). In addition, the contextual situation - resource availability and staff characteristics at the building level - influenced the nature of the interventions by the above principal, but climate appeared to have been a major influential factor.

It appears that the notion of climate also operated in other school situations. It will be recalled from the section on Instructional Leadership, one of the principals commented that his implementation activities depended "to a degree on the dynamics that are in the school and in personnel." This principal, like the one mentioned immediately above went about prioritizing the curricula on the basis of staff input and a collegial decision making process.

As a staff, we sat down a year ago and we decided to increase the emphasis on writing skills ... not to the detriment of writing, listening, or speaking, but that was one (area) we thought was probably in need of most change It is pretty well a staff decision, although, I try to influence them in certain directions This year we have started to pump a lot of resources into Science which we feel is a kind of neglected area with all the influence and all the prestige going into the Language Arts. I think, we sort of left the Science a little bit behind. So we are sort of going over what we got in Science and where we're going. We are going to be spending, and trying in fact to increase the prestige of the Science Program. In the Provincial Science Fair we really didn't score badly. It takes a lot of money to do that. You have to be careful about how you set your priorities. You couldn't do it in all the subjects in the one year. You have to be careful not to forget about some subjects while looking at the other ones. That's very important.

It was mentioned earlier that most principals prioritized the innovative curricula that came into their schools. Two principals claimed that they did not

actually prioritize the curricula, but rather implemented all the curricula placing equal emphasis upon all of them. They used the incremental approach described earlier. One of the two principals commented, "We haven't prioritized any of them; the strategy is to try to accommodate the curricula as best we can." This principal was one who believed that the curricula were developed by knowledgeable people and, therefore, should be implemented. However, while placing equal emphasis on all the curricula, this principal prioritized some of his activities due to limitation on resources. He commented.

We are prioritizing right now. We are giving priority to enrichment which is field tripping and cultural activities which the school wouldn't get any other way. These are, getting artists in the school, concerts, people that do drama, plays, ballet and so forth. That takes about \$2,000.00 for field trips and cultural activities. Last year, it was library books. Those are the three main priorities. The rest of the allotments go to Physical Education, Science, and whatever

In terms of his resource prioritization, the principal stated that \$5,200.00 was raised by parents, whereas the school budget allocated by the division was \$8,700.00. So a good portion of the resource allocation came from parental and community input. This situation existed, though in varying degrees, in other schools as well. This factor was examined under the section Resources in Chapter Five. It would appear that the prioritizing in this

school by the principal reflected the community situation, a factor observed earlier in this section.

Another principal also stated that he prioritized his curricula "basically for resources as much as anything."

He reported,

We have a very limited budget and to get the support materials I want to divert a major portion of our budget on that particular area (i.e. the area of focus). There is a danger in that, which I recognize. If you work on a three or four year cycle, you can fall behind as fast as you catch up. So, you run two steps forward, and you fall back one. Nevertheless, I really don't think it is practical to try and get all the materials on all the subjects.

The actions of these principals in prioritizing their resource allocation is reflective of the multi-level perspective referred to earlier. Massive amounts of innovative curricula have been introduced into the schools, yet neither School Divisions nor the Department of Education have allocated commensurate resources for materials. This has impacted upon the implementation process itself. Principals, as a result, have devised various strategies to accommodate the constraints imposed by resource allocation decisions. It will be recalled from a teacher's comments earlier in this section, that she prioritized her instruction on the basis of materials as well. So, with the introduction of all the innovative curricula, principals employed a major strategy to cope

with all the changes required - namely, prioritization of the curricula as well as resource for implementation of these.

To summarize then, in terms of the instructional managerial behavior of principals faced with massive amounts of curricula introduced into their schools and mandated for implementation, principals employed various strategies in the implementation process. A strategy recommended by the Division and the Department of Education is the incremental implementation of these new curricula. However, principals prioritized the curricula on other factors; on their perception of the centralization mandate; on their own values; on contextual factors such as school climate, staff competence or staff conservatism, on environmental factors such as parental demands or the socioeconomic background of the community; and on the availability of resources and materials. Principals, for the most part, involved their staff in the prioritization process largely to build and maintain a positive school climate and to give teachers the opportunity to develop a sense of ownership in the decisions to implement. This was thought to build a better sense of teacher efficacy.

In the process of prioritizing, however, principals and teachers showed concerns for those curricula not prio-

rized. Some admitted that the limited attention paid to those curricula had a tendency for lukewarm implementation or implementation without the philosophical underpinnings, in short, surface implementation. It was suggested, however, that as implementors focused upon the curriculum, in this case the English Language Arts being the priority status curriculum, deep implementation would result and have a transferability factor to other curricula areas not currently prioritized. The notion of "climate" and principals' involvement of staffs in the prioritizing process have emerged as important factors. As a matter of fact, these two factors were considered to be crucial in the curriculum implementation process itself. The next section looks at principals' decision making processes in further detail.

Planning, Decision Making Strategies

In the previous section it was observed that in the process of prioritizing curricula for implementation, principals collaborated with teachers in planning and making decisions for their schools. One of the principals explained this action quite clearly by saying "they are the ones who have to carry out the decisions. They are the ones on the firing line actually, when it comes right down to teaching." The comment, by a principal earlier that he couldn't do the implementation by himself, was a

recognition that with the massive amounts of innovative curricula coming into the schools, not only was it necessary to prioritize the curricula, but decision making and planning, as well as continuous consultation and feedback sessions with teachers, were necessary to ensure successful implementation. The research and theoretical literature from the Hawthorne Studies offer sufficient evidence that where the above conditions prevail, implementation success is usually the norm. Involvement by implementors in meaningful decision making and planning at loci closest to where the programs are implemented have proven more effective. The literature is replete with successful examples.

In this study, it was observed that all principals, even those who were prone to more bureaucratic forms of administration, engaged in some form of participatory planning and decision making with their teachers. In every school, a team spirit or team approach was emphasized. However, participatory planning and decision making varied. In one school the staff was observed to have almost complete freedom; they planned, made the decisions and implemented the program. The principal explained,

The teachers here tend to work ... seem to work together well and discuss things among themselves. A lot of time, I'm not

even involved in a lot of it. They tend to keep things rolling very well with discussions among themselves as to what's going on. Teachers here tend to assume those responsibilities fairly readily.

The principal appeared to have been an advisor rather than an autocrat. This principal said he was a facilitator, and was somewhat active in this role, but allowed his staff full reign, surprisingly with a great measure of success (in this case, if success can be defined as an operation encountering no crisis).

In other areas, principals varied the control they exercised, even if staffs were made to feel they had a major input, principals admitted to having guided or manipulated the process. Staffs, nevertheless, felt that they had meaningful participation. Except in one instance where a principal allocated professional development funds himself, all sampled teachers generally concurred with their principals on statements made about participatory planning and decision making. A few principals admitted to having autocratic tendencies, nevertheless, the schools sampled in this division appeared to have had a very high measure participatory decision making and planning. Participatory decision making observed here, perhaps reflects principals' feelings about education, teaching, and learning, but also upon contextual factors. A closer examination will be more revealing.

As mentioned before, the planning and decision making process varied with the schools. In smaller schools, the process tended to be more of the informal type. In the larger schools, the process was more structured and formal as shown in the following example. In this school, there are both Primary and Junior High Grades. The process of planning and decision making are both formal and informal. Here the principal claimed that a collegial climate existed. He said, and the sampled teacher agreed, that most of the curricular decisions are arrived at collegially. This principal was one of those who sat with his staff in the informal lunch hour sessions (Figure 12) trying to comprehend the philosophy of the new English Language Arts curriculum. Mention was made in the previous section about the collaborative efforts of this staff at prioritizing writing in the English Language Arts curricula. This principal used the team approach in planning and decision making.

There has to be involvement by the staff ... plus encouragement, and you have to give them some praise. We recently sat down, the three of us (staff from the different sections) and made a proposal to the School Board for next year and that really pays off. You make some good solid plans for next year and they are recognized by the school and the division ... and you are rewarded

This principal's reason for planning, however, is not for the rewards, though it is helpful. Planning is done in

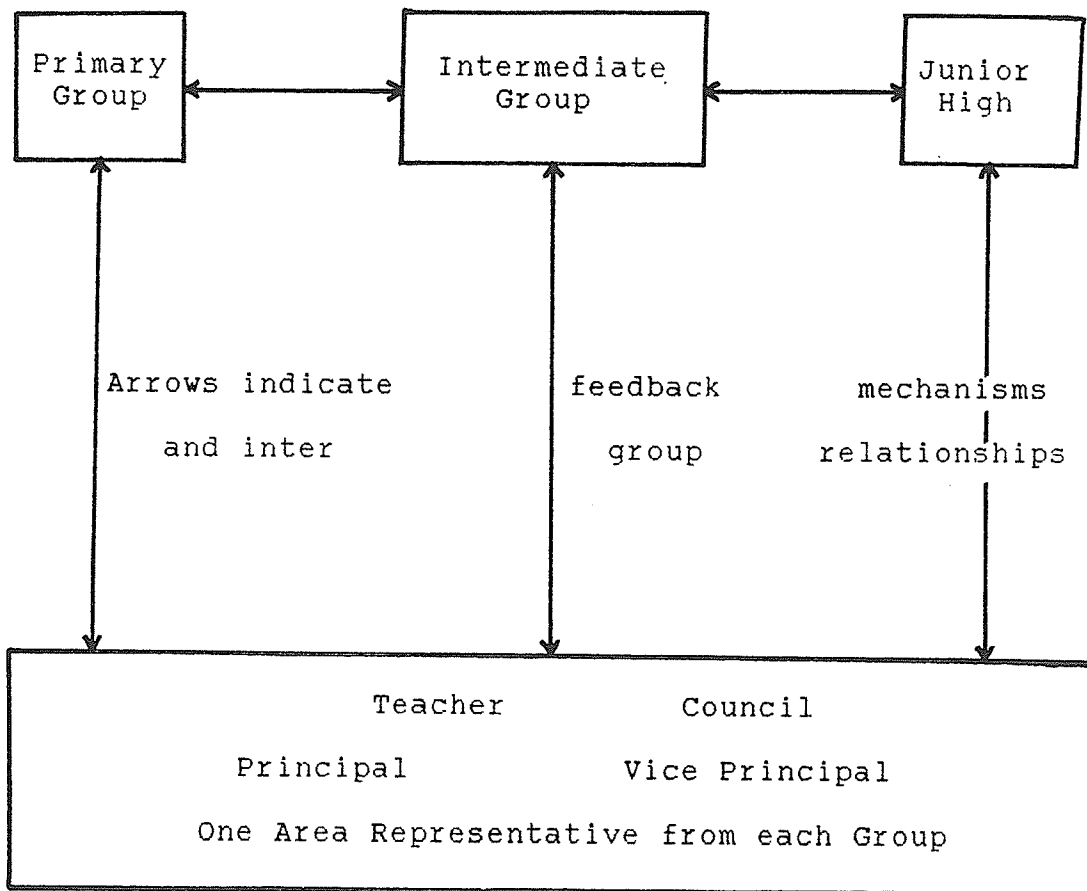
order to project the direction to be taken.

It is important to sit down as a whole staff and sort of set up kind of guideline for the year. It is really essential to do that so that somebody doesn't take off on you in the middle of the year and decide to take a completely different focus. You have to be careful of that. Sometimes things can happen in spite of your guidelines you've set up. The way this school operates is through the teacher council. I have a teacher representative that is elected by the teachers; for example, one from Primary, one from Intermediate, one from Junior High, and those three plus my vice-principal and myself map out strategies for inservicing and it's a feedback mechanism and we sit down at least once a month even from the point of view of planning staff meetings and distributing daily kinds of stuff. The representatives in turn meet with their area groups, field questions, dispense information and reinforce priorities that we may have made as a group. That's basically our mechanism for that kind of thing and it works. It really works well [See Figure 21].

The planning and decision-making processes subsumed in the structure in Figure 21 suggest a rigid bureaucratic structure. The rationalistic overtones, however, as stated by the principal and the sampled teacher are not really there. Because this is a relatively larger school in the division with different departments, a communication structure is required for the smooth operation of the school. The importance of good regular communication was emphasized by Peters and Waterman (1982). Peters and Waterman observed that successful organizations cultivated communications with

Figure 21.

Principal's Planning, Decision Making Structure



Function: Map out Strategies

Plan Staff Meetings

Set Priorities and Reinforce

Allocate Resources

Dispense Information

its members. This gave a feeling of being valued as a member of the organization. This positive feeling in turn promoted the objectives of the organization. The function of the communication structure here appeared to serve a similar function as well as meeting the needs of a larger more complex organization. Fullan (1985) observed that interactive relationship focusing on specific problems or innovations represented a major route to change.

In the smaller schools, such structures do not exist. Size is a major variable here. Research has indicated that as instructional technologies become more complex, principals and teachers create groups in order to carry out organizational functions. Contingency theorists have also argued that as organizations become more complex greater coordination is required (See for example the works of Lawrence and Lorsch, 1967, and Galbraith, 1973).

In another school serving students' needs, the principal said that they worked

largely as a group; to do a lot of talking and from that comes suggestions We meet as groups and establish where we're going. The Intermediate people will say, 'okay, let's focus on something particular for a term or a year'

This principal allowed his staff to participate but gave them the impression that they were making the decision.

I never like to have it appear that I'm the one who is making the final decision.

In whatever way I have to manipulate, I like the staff to feel that they are the ones making the decisions. Occasionally, I have to, but, they've got to feel that they've done it, or had a lot of input.

The principal's rationalization was that the staff member were the ones carrying out the implementation and were on the firing line. Like the previous school discussed above, this school operated on a committee system similar to that described above. A considerable amount of delegation of responsibilities was carried out. A great measure of decentralization existed in this school as in the one above. This is consistent with what has been reported in the literature on organization theory already discussed in the literature review. A notable feature in this school was the existence of an advisory committee consisting of teachers for teachers. This committee has considerable power in allocating funds raised by the Parent Committee. Other school matters were also handled by this committee. There were also different committees for the different subject areas. The principal had delegated implementation responsibilities to these committees and was an active participant himself. In the area of the school budget, however, the principal allocated the funds; he made the decision because of the limited funds and competing needs.

They all can't have their wishes. I know how

many dollars are there and someone has to prioritize those So, I'll decide and say 'we need chart stands. Okay, I'll order them.' Then I have to make sure they use them.

So in this school, both autocratic and participative decision making operated. This situation was found to exist in almost all the schools, particularly in the area of budgeting. Contingency theorists have an explanation for this type of conflicting decision making. Schools as organizations are simply responding to environmental situations.

In the school discussed earlier where the teacher reported she was quite happy and would not leave, the principal allowed staff "some input" into budgeting decisions but only after he had allocated a sum for general school supplies. Quite a few principals appeared to be doing this. They allocated a general school budget for supplies needed by all staff, then collectively "sit down" and plan for other expenditures.

Another teaching principal was more autocratic than the one above in the allocation of funds for curriculum implementation. This principal organized and focused his entire school around the curriculum. Meetings here were generally held in an informal, friendly atmosphere because of the very small staff, less than half a dozen. However, because of the limited resources, this principal reverted in some instances, to a more autocratic mode of

decision making, yet allowed his staff some participation where they were more directly involved. The principal's rationalization for his actions was quite clear from his statements. He has limited resources with which to operate his school. The concept of the multi-level perspective discussed earlier is recalled at this juncture. The following senario was created by the principal.

I tend to be rather autocratic in the allocation of funds and basically that's because our resources are so limited. About the only thing the teachers have a free hand at is that I allocate so much for each classroom for library books and they get to choose those themselves. Apart from that, I tend to administer most of the funds coming into the school. Now, when I say most of them, quite frankly by the time we have covered our basic costs which takes about a third of the budget ... there isn't much left over. We tend to live close to the bone

In terms of the Small Schools' Grant, what I have done there is given a lot more freedom in terms of allocating blocks of monies for the classroom teachers. Basically, with the focus on the Language Arts, I advise spending in that direction, but, nevertheless, there is a certain amount of freedom.

The situation in another school was almost replicated as in the school above. Both the principal and staff, including the parents collectively, planned their expenditures for the following year. The principal, however, held the final decision on the allocations. Teachers appeared to be satisfied with the procedure.

Both teachers and principal, here as well as elsewhere, did a considerable amount of bargaining, receiving something in one area or foregoing something else in another area. The teacher in this school said that decisions here were made

mostly in consultation with people; we have a lot of input ...; it's pretty much a give and take The principal is fairly good at making the final decision when necessary.

This school operated on a committee system similar to the one described earlier. Operational procedures appeared to be largely informal, in a very friendly atmosphere. The teacher commented:

We are small enough, so it is easier to talk in little groups at lunch time and recess time. The principal sets a very friendly tone here. There are people that are really good friends which helps too, friends outside the school too.

Even in the larger schools, the sort of strategies discussed above were in operation. Another teacher commented:

We've tried to work as a team and as such we've had meetings, the staff, resource teacher and the principal. We've discussed various strategies or plans we could use in implementing the curricula. The principal in this school came up with several objectives for the year for us to focus on. Using those objectives, we were better able to plan the particular program for the pupils. Teachers came back with feedback as to what they would like to see in the next meeting. It was a collegial approach. Teachers have been very happy that a lot of times they

get what they've asked for. They have been able to get things.

It may be recalled in the section on Instructional Leadership, a principal commented on his participation with staff in planning, leading but not pushing. This principal also utilized his consultants and the Parents' Association for curriculum implementation. The Parent Teacher Association was briefed on the school program and in turn assisted with fund raising for equipment purchases and other school supplies.

In one of the schools sampled in the study, the principal appeared to be more of a bureaucratic manager claiming that he as principal was better able to see the total picture. It also appeared that the staff was not too comfortable with this position. The teacher interviewed expressed her concern about some of the decisions that had been made and felt that some teachers were favoured over others. The principal commented:

I make the final decision and make it on the basis of the recommendation of the teachers and I use my judgement in terms of where it will do the most good. If I have a teacher who is spending a great deal of time, putting in two weeks of her summer holidays in a special course ... going in on weekends on her own, then I know she is committed to the program and if she asks for a couple hundred dollars extra, I'll give her priority over the others I know sometimes people are not happy. I have to do it that way. I find that if I make a

collective decision, I would be giving away some of the authority or responsibility of mine. I just feel I have to do that because ultimately, the judgement of the school is going to be placed on my shoulders For me as a principal, my job is to see the total picture and if I see the total picture, then I can't expect the staff to see the total picture. They have to see their aspect of it. That's how I want it to be.

This principal appeared to operate more from the traditional authoritarian perspective, but it did not appear that this mode of operation had any negative effect upon implementation. It did create some tensions, however, among staff. It may be noted that this principal had gone to great lengths to provide and arrange for teachers' attendance at professional development sessions even to the point of infringing the rules of the organization.

It was mentioned that implementing changes were a "complex, dilemma-ridden, technical sociopolitical process" (Fullan, 1985, p. 391). Given this environment, principals are constantly on the "firing line" more so when they are responsible for implementing a mass of new curricula. Principals admitted that they could not accomplish this task by themselves, nor, within the normal structures as existed. Principals, as a consequence, modified the system, using the modified structures to carry out the mandates. In the preceding

sections, mention has already been made on some of these modifications. The formation of reporting groups, dyads and committees are some of these modifications. The delegation of authority is another such adaptation. In the previous section, it was reported that in one school, the principal had delegated almost complete responsibilities to his staff. Principals also frequently took over the classes of teachers, thus providing release time for teachers, at no cost to the school or division in order for staff to attend workshops or professional development activities related to the curriculum implementation efforts. The above types of activities were within the normal operating procedures of the schools. In two cases, however, principals bent the rules to accommodate staff attendance at a very important workshop on the Whole Language Approach to teaching - the very foundation of the new English Language Arts Curriculum. In one school, the principal accomplished this task with the use of teacher aides and student teachers. He also took a class. In another school, the principal devised a more intricate strategy. He explained how this was carried out.

We had a great deal of interest from people who go to the C.E.L. workshops. There was no way we could afford to send everybody. We just couldn't do it. Subs-

titute cost and everything was prohibitive, but the staff said we could do it I have two half time teachers and they volunteered to come in and put in additional time. As a staff, they made it possible. We covered all the classes the whole day for two days so we could free five teachers to go to this workshop.

We made a trade with the volunteers. We told them since they worked only half time, they could have a full day off anytime during the year at their choosing. It was not my suggestion. It was not something I said we could do. It came from the staff (and) I was pleased with that. It was a solution. I would never have done that. I feel that would be putting too many people on the spot (in a precarious position). But when they brought it themselves, it showed me that the system is working. So there was a commitment and a trade-off too. And we spent some money too. It cost \$300.00 to send teachers to that workshop. They knew they had to give up on something else, but they agreed saying, 'That's fine, we will do it.'

The concept of "creative insubordination" has been reported in the literature as part of the principals' decision making process (Morris et al., 1981). These discretionary decisions were crucial to the successful implementation efforts. They were generally made on a gentleman's agreement basis where parties recognized the ultimate good that can be derived from these decisions. In this case, these principals and their staffs were confronted with a radically different curricula that called for a major shift in methodology. The new curricula was thought to be potentially more beneficial for students than the old (a topic explored in Chapter

Five), consequently, the consensus of agreement on the infringement of the rules. Organization theory (Blau, 1955) has reported that where there was a continuous and persistent infringement of the rules by officials, the organization tended to be more successful. Burns and Stalker (1961) also observed that in changing environments, adaptive organizational structures also tended to be more successful. In the case of these schools, principals and staff found that such adaptation was necessary. The mutually agreed to decisions also tell of the team spirit and collegiality operating in these school. There appears to have been a high measure of esprit de corps in all the schools. This could in no way but help to facilitate the curriculum implementation process to the benefit of the students.

In summary then, principals' planning and decision making strategies were largely collaborative ventures that involved close teacher participation and feedback sessions. Plans were made and implemented with active staff and principal's participation, occasionally including Parent Councils, as well as consultants. A team approach with collegial decision making was the usual norm. Occasionally, some principals would make the final decision which was interpreted to be somewhat autocratic but necessary, due to constraints and other factors such

as the principals' ultimate responsibility for the operation of their schools. One principal stated that his mode of operation was bureaucratic. In small schools, the planning, decision making process was largely informal operating in a friendly atmosphere. In the larger schools, it was necessary to modify organizational structures for a smoother operation. Because of the more complex nature of the organization, these structures were necessary and appeared more formal and bureaucratic, but in fact, operated in a collegial climate. Principals were aware that meaningful participation created a positive climate and, therefore, was effective in the implementation of the innovative curricula. Principals also found it necessary to make discretionary decisions in order to ensure successful implementation. Occasionally, this meant an infringement of the rules by both principal and staff. This practice was reported to be frequent in the research and theoretical literature. These mutually agreed to infringement also reflected the harmonious climate existing in the schools.

Student - Staff Effects

Because of the multi-dimensional complex nature of curriculum implementation, the question of measurement of principal effectiveness, staff effects and students effects become problematic. The issue of measurement has

been dealt with quite extensively in the research literature. This study looks at the process of curriculum implementation of large amounts of innovative curricula undertaken by principals. Since the changes advocated by educators involved, ostensibly, meeting the needs of students, a question arises, therefore, as to the effects of these changes. Purkey and Smith (1985, p. 379) stated "that some means of measuring change is necessary as evidence that schools have indeed advanced or show where further improvement must take place."

Organizational performance is very commonly measured through students' achievement scores. Quantitative measurements, however, lack the richness offered by qualitative descriptions. Contextual processes, notions of climate or "thick data" mentioned in Chapter Three, are missed in quantitative measurements. How does one quantify students' effects of ballet, music, art, or drama, emphasized by one principal in this study? Manasse (1985, p. 440), perhaps outlined the problem quite well when he stated

The scientific community has yet to develop either the theory or the research methodology to trace the impact of managerial actions on organizational productivity. In the case of schools, a multitude of other factors intervene between the actions of the principal and any measures of school effectiveness.

This section will discuss some of the effects of the

innovative curricula on students as described by principals and teachers and as observed by this researcher.

Many of the characteristics described in Chapters Five and Six, for example, collaborative planning, decision making or school climate, have been reported as having positive results in the school effects research. It is, therefore, reasonable to infer that the characteristics in this study, similarly have positive impacts; that is, students have benefited from the implementation of these innovative curricula. Flanagan (1954), suggested such inferences with the use of his "critical incident technique." He stated that inferences can be drawn "in light of relevant established principles ... and of the known facts regarding background factors and conditions operating in the specific situation" (p.335).

All principals and teachers in this study stated quite emphatically that they felt the innovative curricula have had positive effects upon students' achievement and behavior. Some of these have already been alluded to, for example, students freely and happily going to the principals to have their (students) short stories read. Observations by this researcher on the reflective remark sheet concur with principals' and

teachers' remarks. Students have undergone tremendous changes particularly in the Language Arts area. Their enthusiasm for reading and writing have certainly changed and improved; for example, within a few days, one Grade Two youngster avidly read over twenty-five books verified by her parents (See Figure 22). This youngster proudly and spontaneously announced to her parents over supper one day saying, "I just have to finish a few more pages and then I'll be publishing my third book." She was very proud of this achievement. Table 8 outlines some of the comments of principals and teachers as they perceived the impact of the innovative curricula upon students. Additional assessment data on these provincial programs can be found in various assessment reports done by the Department of Education. This study presents qualitative data as stated by implementors.

Table 8

Principals' and Teachers' Perceptions of the Impact
of the Innovative Curricula on Students

Principal A

High interest is how our students have been affected. Students are doing much more writing and much more reading as well. I think the net result will be better and higher achievers. I don't have any tests to say that right now, but, I see no reason not to believe that. When I go to primary classrooms, students will come up to me and say, 'Mr. K..... can I read this

FIGURE 22.

Record of a Grade Two Pupil's Reading

NAME of Book	DATE	COMMENTS	INITIAL
Twelve day of Christmas	Jan 21	I Love the song 10	JB
How To Be a Grouch	Jan 22	very good 11	JB
Ernie's Telephone Call	Jan 22	I like when Bert got scared. 12	JB
Santa's Toy Shop	Jan 22	Very Good. 13	JB
Frosty The snowman	Jan 22	Very good. 14	JB
The B Book	Jan 23	Very good. 15	JB
My little Book of Dinosaurs	Jan 23	Very good. 16	JB
The alligator with the lead mean smile	Jan 23	Very good. 17	JB
the biggest most beautiful Christmas tree ever	Jan 23	I like the christmas tree 18	JB
in a people House	Jan 23	Very good. 19	JB
great day for trip	Jan 23	Very good. 20	JB
Big Bird Follows the Signs	Jan 24	Very good. 21	JB
The Invention of Paper	Jan 24	Very good. 22	JB
Fast Albert + the Cosby Kids	Jan 24	Very good. 23	JB
Barbie and Skipper go Camping	Jan 24	Very good. 24	JB
Donald Duck and Chip 'n' Dale	Jan 24	Very good. 25	JB
No Sit-ups for Rocky Pig	Jan 24	Very good. 26	JB
Grover's own Alphabet	Jan 24	Very good. 27	JB
The road runner	Jan 24	Very good. 28	JB
tweety	Jan 24	I like the bird. 29	JB
Woody Woodpecker	Jan 24	I like woody woodpecker. 30	JB
croaky and his wonderful cornet	Jan 24	I like the cornet. 31	JB
Let's count all the animals	Jan 24	I like animals. 32	JB
A horse For Charlie	Jan 24	I like the horses. 33	JB
My little book of boats	Jan 24	I like boats. 34	JB
Bugs Bunny in something fishy	Jan 24	I like bunnies. 35	JB
ALL around the City	Jan 24	Very good. 36	JB
Princess of power	Jan 24	Very good. 37	JB

book to you?' It happens almost every time when I walk to classrooms in the Primary section. This tells me that students are excited about the program. I've heard teachers saying, 'This is so much more fun teaching this way than the other way.'

Teacher A.

They are definitely broader and better readers. They are more able to find materials I know in the last three years, the children coming to me in the Grade 3 and Grade 4 are better and wider readers. I hardly ever have a child who says, 'I don't want to read.' I think they are broader and better students.

Principal B.

I have seen a lot of good things happen in the language area. The Social Studies curriculum - it's giving kids a better understanding Easier to relate to in terms of where kids are today.

Teacher B.

I'm pleased with the results from the change. Children are picking up Computers at a much more rapid rate than adults are learning. The problem for teachers is keeping up with the children they are teaching.

Principal C.

I find the students in the elementary school to be more satisfied than I remember students being in school. It (the new curricula) seems to be more positive.

Teacher C.

I think there is more development in the awareness of the world ... rather than just book learning. The self-esteem has improved. In language skills I think reading and writing have improved.

Principal D.

I believe that it (the innovative curricula) has helped to develop a more positive self-image of themselves. I think they feel more competent and they have a better and higher self esteem They are not reluctant to speak, perform; not reluctant to read. They will get up in assembly; they will do little presentations in assembly, do speeches. They will do things that were difficult to drag out of elementary students a number of years ago. Students feel they are part of the school They will read little things

they have written, and they will bring it here in the office It's developing communication at a level that's not artificial; this is real communication.

I have difficulty having data substantiating this because it is difficult to get these results The things I'm telling you are things I have noticed, and for those things, someone can say 'prove it'. Well! I really can't prove it. It is difficult to get meaningful statistics. These are my observations and feelings I have about the school and students

Teacher D.

Overall, I think they have enjoyed it. I think it helped their self-concept ... and I think when that happens, then, there is more learning and it is not teacher directed.

Principal E.

Teachers are feeling better about what they are doing with a lot of pride ... and that certainly, has a positive spin-off on the children. The teacher sees herself in a positive way and it reflects on the children. I hear them being very positive I see them viewing children in that kind of way, whereas before, children couldn't fit this lock step system of finishing up a workbook page and going on to another and the child wasn't learning. Now they are accepting children with limitations (problems) and are putting them on kind of broad continuum in terms of their reading and they (children) are functioning at a particular level.

Teacher E.

I think children are excited (by) giving them authorship in the books and things like that. They are becoming in control of their writing. They can pick up any kind of book and read it ... and are excited I think they are involved and more actively learning.

Principal F.

You do see the products; the children are coming from class and you do realize that there are some changes taking place. It is really rewarding to see change taking place in the direction that you want it. That really makes you feel good Some of the students write little notes to me quite regularly the stuff on the walls, in the hallways and in the classrooms and things like that

Teacher F.

I have never seen, at this point in time, individual students having trouble with reading, or having read as widely because the levels are there and the interest is there. I see a lot of difference, far more verbal ... a lot of writing. Now they are writing their souls which I love - very enthusiastic. Their response to computers are more responsible. They are dealing with \$2,000.00 machines and behaving very responsibly. They are motivated. I think it is a much more positive atmosphere, and that doesn't mean I am soft.

Principal G.

It has been a very positive approach in the classrooms. They like it. They have a chance to actually be heard by the teacher and not having to listen to the teacher all the time. The children are always bringing me stuff that they read for me and I try to read theirs. I hear children say they are enjoying Health. There was a time when they'd say, 'We're not studying the eye again, are we?' The Grade 5 children are really keen on Social Studies project work. They are really enjoying it ... I think it has been on track.

Teacher G.

Overall, I hear teachers saying things that have really affected the children positively. That is most apparent in the Language Arts area ... and it sort of encompasses everything. But time and time again, I hear new teachers and even teachers who have taught for twenty years say, 'Boy! I'll sure never teach that old way again.'

Principal H.

The curriculum has affected them (pupils) by giving them more research ability, allowing them more freedom to be creative, and I mean freedom in creative writing or drama. This school for the first time ever put on a major Christmas concert ... to which all the parents were invited ... and we did that because we said, it was part of the Language Arts - listening, speaking, reading, writing. We had some beautiful feedback. The students were rewarded for their work.

Their self-concept have improved. They go out in the hallway and read stories to one another or paint pictures without the teacher constantly supervising them. I think that's good.

The fact that the children want to come to see me all the time with their stories, pictures is good. If they want to come, it is not a place where they will be threatened with their lives anymore. It is a place to share.

Teacher H.

I can see the creativity and the children have a lot of creativity, more so than before. They are not afraid to speak; they are open ; they express themselves. They are so knowledgeable. They ask such good questions. It amazes me. They are not afraid to ask 'why'. That is the big thing I have noticed since we brought in the curricula. One student was writing a story (in Language Arts) on the greatest scoop of the year and said, 'I want to make sure I have the right longitude and latitude of Brazil.' I thought (that was) marvelous.

Principal I.

The kids are much more open; they are doing things and learning more by themselves. They have a more positive attitude, and are self-motivated and more enthusiastic.

Teacher I.

I want to say that the students are more enthusiastic about doing things ... about reading, writing because there is not a gate or locked door; they can go on and do those things.

Principal J.

I would say they are happier in school ..., and you can see something positive in what they are doing. There are more avenues for those who can contribute orally and have difficulty putting it in print

Teacher J.

Our scores are good when you think of the area we are in. On the Canadian Achievement Tests, our children rate as well as we can expect in terms of the provincial norms and division norms. We really can't say we are ashamed of anything, so we must be doing something right. I was pleased with the marks (the Standardized Provincial Tests).

We are very proud of what the children have put out. I think they are enjoying it (the new curricula). They are involved and we don't have any complaints from parents. And when the parents back you like they

do here, it really means a lot, so much that I just wouldn't move.

To summarize this section then, the qualitative data presented in Table 8 above, reveals a number of factors about the impact of the innovative curricula. Students appear to have a more positive outlook, are writing more, and are reading more. Their interaction and communicative abilities appear to have increased as well. Their self-concept also appears to have increased and they are enjoying school at the elementary level more than before. Even the teachers appear to be much happier and satisfied with their jobs and this is partially related to the new curricula and their relationships with their students. While the question of causality may be difficult to prove, due to the lack of "meaningful statistics" as stated by a principal, the descriptions on student effects are things "seen" and "observed" by both teachers and principals. Their observations are congruent with observations made by this researcher.

Teachers' and principals' descriptions of observed students effects and outcomes appear to have a high measure of congruency and consistency within schools and across schools in the division. Convergent validity appears to be high. This can only mean that the goals and objectives of the innovative curricula are being carried

out, that is, the innovative curricula are producing the changes desired. To what extent, and to what depth, was outside the scope of the study. Perhaps the quantitative type studies could provide answers. What is observed here is that the new curricula are producing positive intended outcomes in students, and as such, the implementation of these innovative curricula is taking place. In other words, principals and teachers are implementing the new curricula as described in this study.

Articulation: How does the New Curricula Fit in with Other School Programs? (Curricula Congruency).

Five major curricula characteristics were examined in the literature review. These were relative advantage, compatibility, trialability, observability, and complexity. The implementation literature and theoretical literature provide evidence that these characteristics influenced innovation success. These characteristics have been commented upon in Chapter Five. While data from this research support the conceptualizations above to a degree, evidence from this research suggests that principals and teachers took many measures to overcome the problems confronting them. These measures have been quite successful. For example, the Computer Awareness Program not only called for modifications of

the buildings themselves, but changes in the school scheduling as well. It will be recalled from one of the sections in this chapter that a principal had to reorganize the library system to accommodate the changes. Teachers as well, had to take extra university courses and other training to accommodate these innovative programs. The shortage of equipment also posed problems, but principals and teachers were able to get parents' assistance through fund raising activities to purchase computers and other equipment. The research literature reported that such "structural" changes would have been resisted, and the innovation as a result would have ended in failure. Yet, data from this study showed that the innovations were successfully integrated into all the schools, notwithstanding the "structural" difficulties and contrary research findings in the literature. The comments of a teacher from the last section above, about pupils overtaking adults in computer literacy, is sufficient evidence that these innovative programs have integrated quite successfully into the schools' programs, but not without encountering many hurdles. A Grade 7 youngster provided computer assistance for the typing of this manuscript.

Berman and McLaughlin (1976), have stated in their Rand Studies that where "structural complexity" in an

innovative program is perceived to be great, and is accompanied by strong central support, such a program was likely to be successful. The division did put the English Language Arts and Computer Awareness curricula as priorities and these were perceived by principals and teachers as such. Because of the interactive nature of implementation variables, however, it is difficult to partition off the contribution of the division to implementation success. What is known is that these curricula presented a tremendous amount of difficulty for principals and teachers alike who nevertheless, went about the process of implementing these curricula quite successfully as indicated in the sections above. The following descriptions in Table 9 examine the question of curricula congruency in more detail as commented by some principals and teachers.

Table 9

Selected Principals' and Teachers' Perceptions of
Curricula Congruency

Principal A.

I think the new curricula fits very nicely with students' needs. There are certain time restrictions that make it difficult. Teachers are enjoying that kind of teaching. The rooms are too small. Initially, when the computers came in we moved them into the classroom. Now with six or seven machines we can't do that; there isn't room in the classroom. We now have a room ... and teachers move into that room ... and half the class goes on the machines while the other half is doing work at the table.

Teacher A.

The Health curriculum which is quite new fits very nicely with everything. Some of the Social Studies in the Primary area are too advanced for many of the children to grasp.

We need more classroom space, an Art room ... a French room ... a Health room. It is a real problem to bring all those things into the classroom We are really crowded; there is no doubt about it.

(Interviewer's question on integration).

Let's take the deer project I did this year. I would start off in the morning by using Mathematics and problems with feeding the deer, quantity and all. The students will figure that out in the math. Our spelling words would all deal with deer. Reading the stories would be selected from varying readers that would be on the deer. When we do Social Studies it would be on how the earlier Plains Indians choose those (deer) for their food and so on. In Science, I would use the deer, its habitat. So, it will all be integrated. But there will be different sections to the date, so they would be different subjects.

Principal B.

The buildings do not lend themselves well to the new curricula ...; there just isn't space. The staff are extremely competent people. We have resident experts practically in every field and that's partly because of their own initiative and training they have given themselves, and partly because of what the division has done for them.

The curricula fits with other school programs. You probably can spend your whole day teaching whole language and cover the entire curriculum if you really are an intuitive teacher.

Teacher B.

All the subjects can be really tied in and I think the more you do that the less there is going to be a clammering for your time You teach grammar when you are doing Science, as well as in other areas I am pleased with the results from the change.

Principal C.

The computers are our biggest problem as far as trying to get them set up so that they are an integral part of the classroom Some teachers tend to be more comfortable with them ...; others are afraid of them in some cases.

Teacher C.

There is one drawback; we don't have a gymnasium. The Grades 1-6 (go to another school) so they will have one long physical education period. We don't have a general activity room. Upstairs is an open area; some students are in the library; some of them are on the computers. There is too much noise. There is a physical limitation.

I haven't heard of any conflicts in the division, except for the Health, and that seems to be a hot potato It's certainly in tune with our school philosophy ... the self-esteem and respect for your neighbour, so this ties in very well with the school's philosophy.

Principal D.

The facilities are always a limiting factor ... We don't have a library The acoustics wasn't thought of that well We want to do some new Language Arts approaches now; in many cases that involves chanting and students getting up and being free to move around. You are limited in this kind of space. Everybody is working quietly and teachers look around (saying) 'I'm not going to disturb everybody, I'm just going to cancel that' A lot of it is juggling time with space.

Teacher D.

(Same as principal on building restrictions). On curricula - I think they all reinforce each other; we are at the point here where our school is just beginning to meld together. The Grade 3 teacher taught for thirty years, saying she wouldn't (teach the whole language); By Christmas time she said, 'Well, I'm going to try it just for a little while.' Now, we are all together into the whole language I think everything is falling together.

Principal E.

The Language Arts is the essence of the school; the reading is the essence (as well, as the) writing, and you get those things covered and everything else fit with it So I have no problem with this curriculum in terms of our school.

Teacher E.

I waited eight months to get extra plug-ins for the computer and listening stations. I had one outlet and if I was using a tape recorder, I couldn't use a

projector. We just don't have the space. Where we needed to talk loudly, the class nextdoor was writing a test. So in that aspect we need a quiet area to go to.

Principal F.

You have to scramble to find a spot to offer the program and that can be a problem You have to plan ahead In two years we put our computers in the third location. When they first came in, we put them (computers) in one room because there happened to be plugs in there. That had been a sewing home economics station; plugs! okay! we thought that was reasonable. But for various reasons the room was inconvenient, so we changed them and put them in another room and just recently, last month, that we decided we knew how the building operated. So the computers were moved for the third time, hopefully for the last

Teacher F.

The curricula is very much an integrated thing ...; it fits in beautifully with everything. We have three plugs in our room and one of them is seven feet high and to use them is ... (pause). One has two prongs and you don't get equipment with two prongs today. I'm not impressed with standing on an eight foot ladder hanging those things From a practical point of view ..., I think the biggest mistake the Department made was letting architects design schools. There is not enough consultation with teachers.

The comments of principals and teachers above are reflective of all subjects sampled in this study. The computers posed the biggest physical problem for principals and teachers. All subjects felt that the English Language Arts curricula probably represented the most dramatic change. This created some serious philosophical and methodological problems for some of the principals and teachers. This problem was viewed in the literature as one of "structural complexity". never-

theless, it appeared that even those teachers who strongly resisted these curricula slowly accepted the changes.

The Concerns Based Adoption Model (CBAM) developed by the Texas group of researchers (Hall, George and Rutherford, 1977; Hall, Loucks, Rutherford and Newlove, 1975; Rutherford, Hall and Newlove, 1982), has been widely used to measure the concerns implementors have when they implement innovative programs such as the ones described here. The CBAM model consists of two main elements. One involves the concept of concerns and is measured by a Stages of Concern (SoC Q) Likert-Scale Questionnaire. This instrument has seven stages from Awareness (i.e. concern or lack of concern with innovation) through Consequence (students' effects) and Collaboration (e.g. coordinating efforts) to Refocusing (revising the innovation). The other element is a Level of Use (LOU) which focuses on how implementors use the innovation. This is a seven stage scale as well, varying from Nonuse through Integration and Renewal.

In this study implementors appeared to have gone through the SoC up to the level of Collaboration. As the LOU instrument was not administered, it is difficult to comment on the Levels of Use. From what has been observed and reported in this study, it is reasonable to comment

that some aspects of the LOU do apply, for example, Orientation, Preparation, Mechanical Use (organizational changes), Routine (few changes), Refinement (changes to increase student outcomes) and Integration.

Not all these curricula were changed that radically; the Social Studies curricula were thought to retain sufficient content from the old and, therefore, principals were able to get their staffs to implement this without much difficulty. In one small school with split grades some serious problems were encountered. For example, French taught in the Junior High Grades was about to be introduced in Grade 5, but the school had split grades 3 and 4 and 5 and 6. The principal faced a problem of allocating staff and commented. "'In terms of organization, it means that certain teachers may end up out of their particular grade preference.'" Even with these types of difficulties, principals and their staffs showed remarkable flexibility in accommodating and implementing these new curricula contrary to what has been reported in the research literature. In summary, it would appear that the innovative curricula, having encountered initial difficulties which were slowly overcome, became fully integrated into the school program.

Chapter Summary

With the introduction of massive amounts of innovative curricula into the schools, the division established a framework with guidelines, timeframes, curriculum committees and consultants to expedite the implementation of these new curricula. Even with these procedures, some weaknesses were observed in the divisional structure which was geared more towards an educative process that would facilitate implementation.

The educative process has been reported in the implementation and theoretical literature as an important factor contributing to the success or failure of implementation. The division recognized the need for professional development and made provision for the same. Both principal and teacher groups were inserviced on the new curricula. Special orientation sessions were held for principals, but while these provided a cognitive map for the principals, they were found to be inadequate for actual implementation. Principals participated in other types of inservices, read the curriculum guides, acquired professional literature, made visitations, or conferred with consultants as well as other principals and staff. Many of the professional development activities were mainly initiated by principals themselves and were consistent with principals' rationales for change and

curricular perceptions.

Principals also provided professional development inservices for their teachers, or made arrangements and provided time to attend or make visitations. Teachers participated in many of these inservices, as well as took extra training at personal cost through university courses and conferences. Teachers showed a remarkable sense of efficacy through personal sacrifice and fidelity to duty.

Teachers and principals found that practical classroom types of professional development over a period of time were most helpful in the implementation process, an observation that is consistent with what is reported in the research literature. Teachers not only attended inservices, but provided many after school sessions for themselves through their own planning and cooperative interactive efforts. On a staff development profile, these professional development activities assume a "bottom-up" profile (Figure 19), an indication of a positive social climate operating in the schools. These professional development activities have been reported by implementors as contributing towards the implementation success.

Principals were very instrumental in showing leadership in the implementation process. They provided

and arranged for inservices, created a positive climate, as well as modelled instructional activities for their staff. Half of the principals taught half-time and so were constrained in the amount of time devoted to demonstrating instructional leadership. These principals described themselves as facilitators, making the arrangements for their teachers to carry out the implementation. One or two principals in this group appeared more as "initiators" rather than facilitators. About five of the principals in this study showed characteristics of "initiators" or "instructional leaders". These principals were mainly non-teaching and were able to devote more of their time to actual implementation. One principal stated that about 50% of his time was actually taken up with implementation. None of the principals in this study could be classified as "responders" as described by Hord et al. (1987). They were "initiators", but stronger than the "manager" conceptualization of Hord et al. (1987).

All principals relied upon second change facilitators, either staff members, or consultants to help them with the implementation. Teachers commented that their principals showed good leadership qualities in the implementation process. It was suggested that both "deep" and "surface" implementation were taking place.

Faced with the massive amounts of curricula, all principals, except one or two, prioritized the curricula for implementation but did not entirely neglect the others. The English Language Arts and Computer curricula were given the greatest priority largely because the division had placed more emphasis on these, but also, because the Language Arts was at the core of the school's curriculum, and Computers represented the technological future. The Social Studies and Health followed. The Art curriculum appeared lowest of the priorities.

Principals' planning, decision making strategies were largely collegial, collaborative and participatory, though one or two principals frequently reverted to a bureaucratic - autocratic mode, rationalized on contextual factors, and in one case, on the perception of role and responsibility. But where this occurred the principal appeared to give the impression of collegiality. Meaningful participation in planning and decision making created more positive and harmonious climates that resulted in better implementation. Principals also used discretionary powers making decisions against established practices, infringing procedures, but all done with mutual staff agreement. This was found to be necessary for effective implementation to take place. The harmonious climate that existed facilitated this process.

Mutual and collaborative practices greatly improved the chances for more effective implementation and better student outcomes. Students were observed to be reading more, writing more, speaking more; they were more outgoing and assertive with improved self-concepts. Their capabilities in computer literacy were thought to be surpassing that of adults. Even teachers and principals felt satisfied and happier with the results, notwithstanding the lack of quantitative "causal" data. Observations on student effects do have a high measure of convergent validity within and across schools in this division. This factor, among others, indicate that the innovative curricula are being implemented. The innovative curricula appear to be producing changes in student outcomes. Deep implementation is taking place, but, to what extent needs further study.

These innovative curricula did not get into the school and classrooms that easily. Numerous problems were encountered. The biggest problem was in the area of the English Language Arts mainly because of the paradigmatic shift in philosophy and methodology. Many teachers and principals initially, did not quite comprehend the nature of the change and had to embark upon an educative process to comprehend this curricula. Even then, some teachers

resisted the change continuing to teach the "old" way. This problem was conceptualized as one of "structural complexity." Principals and teachers went through various "Stages of Concern" and "Levels of Use" before accommodating themselves to the new curriculum. The Computer curriculum also encountered problems. Lack of principal and teacher expertise, as well as physical problems, such as electrical outlets or mere space, were the main difficulty. The other curricula, Art particularly, encountered physical problems as well. But even with these problems, principals and teachers showed remarkable flexibility and initiative in accommodating these changes, implementing the new curricula quite successfully, perhaps because of the positive climate existing in the schools and principals' and teachers' sense of efficacy which was observed by this researcher to be high. The above noted difficulties notwithstanding, the new and revised curricula that were introduced into the schools appeared to have had a high level of implementation to which a great deal of the credit must be attributed to principals and their staffs.

CHAPTER SEVEN

SUMMARY, FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

Summary

In recent years massive amounts of innovative curricula have been developed and introduced into the schools of Manitoba. These new and revised curricula are mandated by the Department of Education for use in the schools of the province. School boards have accepted the mandate and turned over implementation to the schools. It has been expected that principals, as heads of their school, would play a crucial role in advancing the implementation of these innovative curricula.

Research on innovative changes in schools, however, has shown that curriculum implementation has not had a successful history. Moreover, the processes whereby principals implement innovative programs are unclear both in the job descriptions of the principals, and in the research literature. While the research on curriculum implementation is relatively new, the research on what the principal actually does in the curriculum change process has hardly begun.

The phenomenon of curriculum implementation is critical to the entire process of change in schools, and, therefore, warranted examination. The main purpose of the study was to examine how principals perceived and under-

took the process of implementing new and revised curricula in elementary schools in the province of Manitoba. A sub-objective was to determine whether the process of implementation varied among principals and to what extent values, beliefs, assumptions about knowledge and knowing, teaching and learning about the world of the classroom, influenced such variations of the curriculum implementation process.

Werner's conceptual framework was found to be insightful for the purpose of the study. Werner developed his framework on the basis of experiences educators had when they were confronted with the implementation of an innovation in schools. Werner's framework not only looks at the curriculum implementation process but also gets to the heart of the problem; it looks at how personal construct, an individual's beliefs, values, assumptions about knowledge and knowing, teaching and learning mediate the curriculum implementation process. The framework developed and validated with educators throughout British Columbia, has since become a part of the Ministry of Education planning document in that province.

A semi-structured interview guide, essentially a modified version of Werner's framework, was the main instrument used for the collection of data. The modified interview guide was pilot tested with two school

principals in Manitoba and found to be useful for the purpose of this study. The naturalistic or interpretive paradigm, through the case study interview method widely used for similar research studies, was determined by the researcher to be the most appropriate for the study, and for the production of "thick" empirical data that was sought and brought to bear upon the problem of the study.

Further, the researcher thought that the use of a phenomenological approach would produce the qualitative data, which would lead to the improvement of educational practice through the production of "grounded theory". Subjects, as well, suggested a preference for the interview method for reasons similar to those stated above. Elementary school principals and one teacher from each school in a division that was implementing the innovative curricula were interviewed individually for approximately one to two hours in their schools and the data recorded on a magnetic tape. All principals were males with a wide range of experience as classroom teachers and administrators. All teachers were females with a wide range of classroom experience including some with administrative experience as well.

The study adopted a two-pronged approach.

- 1) What the principal says he/she does.
- 2) What selected teachers say the principal does.

All interviews were carried out over a two month period in the spring of 1985 with data reflecting events to that date. Data collection also included unstructured observations made in the overall school setting and recorded on a reflective remark sheet against the question clusters of the interview guide. Valuable data for cross-referencing was obtained with the use of this procedure.

Data analysis consisted of an examination of the voluminous interview transcripts and the use of qualitative methods and the "critical incident technique". Analysis of the data was conducted on two separate levels. In the first level of analysis, the data was read, reread, summarized and clustered into descriptive categories derived from the research and interview questions. The second level was more exploratory and analytic. At this level the researcher examined the summarized data: firstly, looking for patterns and relationships that were emerging; secondly, attempting and making interpretations of the social meaning of phenomena through "thick", qualitative data; and, finally, relating the patterns, relationships and meanings to the research and theoretical literature about principals' behavior in the process of curriculum implementation. The next section examines the major findings in the study.

Review of the Major Findings

This section summarizes the major findings of the study along the lines of the research questions posed in Chapter One. Each research question is reviewed and the findings follow.

Question 1) What (a) are the curricular intentions of the principal, how does s/he feel about (b) what is in place? (c) what needs to change or (d) what needs to stay the same?

Summary of Findings.

All 10 principals in this study felt that curriculum should serve the needs and interests of pupils. Teachers on the whole shared this perception. Fifty percent of principals also felt that curriculum should serve as a major guide for teachers, and be flexible enough to accommodate varying entry behaviors of students, as well as allow teachers to use various approaches and individual expertise in order to carry out the intents of the curriculum. These principals felt that curriculum should not be rigidly adhered to, but be amendable through critical, analytical reflection. Two principals felt that a curriculum was the product, a synthesis of expertise available at the time, and, therefore, should be implemented as designed. The former group of principals were

viewed by this researcher as having a deeper conception of curriculum; they viewed curriculum as something malleable, non linear, and easily "unpacked" for accommodating varying students' needs. The latter group, however, while agreeing that curriculum likewise should meet students' needs, saw curriculum more as end products.

Principals' feelings about the new and revised curricula varied among the principals and with the different curricula. All principals felt that some of the curricula needed change, for example, English Language Arts. Principals also felt that not everything in some curricula needed changing. Much of the content of the Social Studies, for example, did not need revision, although changes were required in the area of instructional methodology.

The changes made in instructional methodology of the English Language Arts were dramatic, but warranted. Variations among principals in their perceptions of the need for change appeared to be based upon the nature of the principals' involvement in the curriculum implementation process, and on how they viewed curriculum. Principals who were deeply involved in the implementation process and had spent time in professional reading, including the curriculum guides, generated more

rationales for change than the less involved principals. This pattern of behavior is consistent with those of similar principals as reported by Bussis et al. (1976). Further, the perception of the need for change as noted by Bennis et al. 1985; Fullan, 1982; Goodlad, 1985; Twain, 1983; among numerous others was a major factor in this study that contributed to implementation success.

Question 2) How does s/he feel about the new program and how do these feelings influence the implementation process?

Summary of Findings.

As observed above, all principals felt the need for change in certain curricula areas, though not to the same extent. While all felt changes in the English Language Arts were necessary, the feelings were not the same for all the newer curricula, for example, the Art Curriculum or even some aspects of the Social Studies Curriculum. Principals viewed these perceptions from a number of perspectives:

- 1) There was a major fundamental change or paradigmatic shift in the methodology of the English Language Arts, with spillover implications in other curricula areas.
- 2) New content was needed and added, for example, in the Social Studies, or Health: however, the new curriculum,

Computer Awareness, took some time to be accepted, but when it was, it was implemented with a great deal of fervour.

3) Much of the revised curricula was viewed to be merely a restructuring of activities to facilitate instruction, and a reflection of changing pedagogic practices.

4) The new and revised curricula were viewed as being more open and more flexible, though some aspects of the Social Studies were viewed as being too detailed; some principals, as well as a few teachers, felt that the major omission in the English Language Arts was in the area of grammar. Others felt that grammar was subsumed in the curriculum.

This researcher felt that the above problem was structural, one of clarity. This problem has been identified in the literature on change (Rogers and Shoemaker, 1971) and discussed by Fullan (1982). Lack of clarity led to variations and modifications of the suggested holistic methodology in this curriculum. A major form of curricula modification was observed to be taking place in many of the schools in the area of grammar instruction. However, where the new programs were congruent with values of the implementors, implementation as intended was facilitated. In most instances this was normally the case, but not without major interventions by

principals. In fact Ross (1982), Leithwood and Montgomery (1982) as observed in the literature review, suggested such a strategy. Principals intervened more directly, or through second change facilitators, either teachers or consultants, in clarifying the rationales, new philosophy and attendant pedagogy, and in instructional leadership, than is reported in the research literature. The above finding in this study is similar to that of Hallinger and Murphy (1987) discussed in the literature review.

Variations among the principals as implementors emerged along the continuum of the hypothesized styles of Hord and Hall (1987) initiators, managers and responders. This researcher felt that at least half of the principals in this study appeared to be initiators as described by Hord and Hall (1987), or as instructional leaders as described by Leithwood and Montgomery (1982). All showed varying degrees of instructional leadership.

Question 3) What is the overall strategy for implementation?

Summary of Findings.

The major implementation strategy utilized by all principals in this study was predicated by the theoretical stance of collegial, collaborative, participatory, shared decision making. All principals used this approach

for their implementation. Some principals were more open, allowing true collegial, participatory planning and decision making, while a few others were more structured, promoting participatory planning and collegial decision making, but retaining all final decisions reminiscent of more managerial types of behaviors. They felt that this was not only their responsibility but also their jurisdiction as well. However, this practice did not appear to affect the climate of the schools, as principals were aware of the effects of bureaucratic behaviors on meaningful participation. Principals were careful about their relationships with their staff, and the effects upon successful implementation. Occasionally, parent councils and consultants were involved in these planning activities.

Within this general overall strategy, however, a number of contextual factors influenced actual implementation. For example, half the principals taught half-time and were constrained in their efforts at demonstrating instructional leadership; they became more facilitators, or coordinators relying upon other personnel to help carry the program. All principals acquired resources and facilities for their staff, and provided professional development opportunities, as well as creating a harmonious climate for implementation. One of the major

strategies involved interventions by principals in order to allay concerns and familiarize teachers with the new philosophy and pedagogic thrust of the new and revised curricula. This strategy was recommended by Ross (1982), Leithwood and Montgomery (1982). Collegial, collaborative, participatory, shared decision making has been lauded in the literature (Argyris, 1971; Blau, 1956; Blau and Scott, 1962; Berman and McLaughlin, 1976; Clark et al. 1984; Fullan, 1982, 1985; Goodlad, 1976; Leithwood and Montgomery, 1982; Purkey and Smith, 1985 and numerous others). However, some (Owen, 1981; Sackney, 1980; Wickstrom, 1979) have cautioned that collaborative decision making is problematic, a factor recognized in this study by one or two of the principals. Collaborative decision making, nevertheless, was the norm observed in this study.

Question 4) What aspects of current practice are affected?

Summary of Findings.

The main pedagogic practice that changed resulted from the underlying philosophy of the revised or new curricula, and the way principals viewed curriculum, children, and the education process. The most dramatic change came about in the area of the English Language

Arts, but had carryover effects in the other curricula areas. The holistic philosophy of the English Language Arts meant that teachers had to change their instructional strategies. Children were no longer regarded as passive recipients of factual information, but freer, reflexive, inquiring individuals. The greatest tensions were encountered in the area of grammar instruction. A few older teachers and one or two principals retained traditional grammar instruction, but utilized the holistic methodology for other areas. This problem was well documented in the research literature, for example, the Rand Studies by Berman and McLaughlin (1975, 1976).

A number of principals made interventions with groups of teachers in informal collegial sessions examining the philosophy of the new curricula, or modelling instruction with peer evaluation and feedback sessions. This appeared to be a major strategy that demonstrated instructional leadership with new pedagogic practices. A principal described this activity as one of the most important carried out in the implementation process. Such educative processes have been noted in the research literature as important contributory factors for successful implementation. (See for example, Fullan, 1982; Gross et al. 1971; Leithwood and Montgomery, 1982, Ross, 1982, Rubin, 1987, among others). Principals also provided oppor-

tunities for school visitations, attendance at conferences, training sessions, and other professional development activities all contributory factors for successful implementation as noted by Rubin (1987) and Fullan (1987). Lee and Wong (1985b) made similar observations in their Manitoba study. Teachers also, on their own volition, participated in numerous professional development activities to enhance their teaching for better implementation. On the whole, a high sense of efficacy was observed in the schools. Fenstermacher and Berliner (1985) referred to in the literature review commented extensively on the above type of professional development as leading to changes in teachers' thinking and classroom behavior.

Question 5) What organizational changes are required?

Summary of Findings.

At the school level, all principals modified organizational structures to varying extent to facilitate implementation. In the smaller schools where principals taught half-time, some delegation of authority was observed, but because of the small size of these schools (in some instances around five or six staff members), operations were carried out largely in a collegial, informal, friendly atmosphere. In the larger schools,

however, it was necessary to modify organizational structures for a smoother operation, through the creation of area committees with specified responsibilities. Because of the more complex nature of the larger schools, the creation of these structures was necessary for successful implementation a factor observed by Gross et al. (1971), Owen (1981) and recommended by Hardy (1983) and Lee and Wong (1985b). Theoretically, they appeared more formal and bureaucratic, but in fact, operated in a collegial climate. Principals often found it necessary to make discretionary decisions in order to ensure successful implementation. Occasionally, this meant agreement by principals and teachers in the infringement of organizational structures for successful implementation to take place. Such mutually agreed to infringement resulted from the harmonious climate cultivated in the schools by principals. Manasse (1985), Morris et al. (1982) suggested that such extra-bureaucratic manoeuvres were necessary for carrying out the school program.

At the divisional level, various organizational changes were carried out to facilitate implementation. Curriculum committees were established and consultative staff appointed by the central administration and made available to the schools. In addition, the divisional principals' forum acted as feedback loops. While some

weaknesses in this structure were observed, the system functioned as an educative process that made important contributions for successful implementation. The study by Hardy (1983) made strong recommendations for development of organizational structures to facilitate implementation of new curricula. In fact, Owen (1981) saw organizational structure as necessary for carrying out organizational tasks. This factor was ever cognizant in the minds of principals in this study and many of them made effective use of this concept.

Question 6) What are the priorities; how are these decided; and how are they staged over time?

Summary of Findings.

With the massive amounts of revised and new curricula going into the schools, principals faced a fundamental problem of how to implement all these curricula with limited budgets, limited resources, and, in some instances, staff capabilities. Structural complexity was perceived to be a major problem that affected implementation. Berman and McLaughlin (1976), Clark et al. (1984), Fullan (1982), Gross et al. (1971) had cautioned that structural complexity was a major variable that affected implementation. Principals utilized various devices in response to the problem of structural

complexity in order to accommodate these innovative curricula. The Department of Education recommended incremental implementation of all the innovative curricula, a strategy followed by all principals. Principals, however, prioritized the curricula on other factors as well: on their perception of the centralization mandate, on their own values, on contextual factors such as school climate, staff capabilities, staff conservatism, time availability, on environmental factors such as parental demands, socioeconomic background of the community and on the availability of resources and materials. Lee (1985) reported in her Manitoba study that teachers did not implement all curriculum and concentrated on those that "were given higher priority".

Curriculum prioritizing was done on a collegial basis with the English Language Arts having priority status due to its pervasive influence and transferability factor on other curricula areas. Social Studies appeared to be the second area of prioritization. All principals, except two who claimed not to be prioritizing any of the curricula, prioritized a curriculum for implementation in a particular year. This was done primarily to focus and conserve limited financial resources for purchases of materials in that area, in that year, to ensure better implementation as intended; also prioritizing was undertaken in order to

cope with the numerous curricula coming into the schools a factor noted by Lee (1985) in her study.

In the process of prioritizing, however, principals and teachers showed concerns for those curricula not prioritized, and some admitted that the limited attention paid to the least prioritized curricula had the tendency for lukewarm implementation or implementation without the philosophical underpinnings, in short, surface implementation a factor commented by Bussis et al. (1976). It was hoped that the transferability factor would operate to limit this problem. Nevertheless, curricula least prioritized did not receive the same attention as those with greater priority.

Question 7) What resources are required? How are these obtained and allocated?

Summary of Findings.

The lack of materials and resources hindered implementation efforts and often resulted in modifications of the implementation strategy and the program. One of the most important resources was identified as the curriculum guides. These, however, needed the principal's input in some instances to help with clarifications. The English Language Arts curriculum for example, necessitated principals' input in helping with clarifications. While

textual materials did not pose any serious problem, supplementary and support material certainly did, a factor noted in the Provincial Social Studies Assessment Program, 1984 as well as the study by Lee (1985), and Lee and Wong (1985b). The cost of purchasing supplementary and a wider variety of materials for the new English Language Arts program posed problems for schools. Some Social Studies materials and activities that were recommended for use were found to be above grade level. Principals recycled old materials and acquired community resources (including the parent associations who made financial contributions to all the schools). Publishing companies also provided materials particularly for the new English Language Arts program. Principals felt that resources were available in the marketplace; however, some felt that most of these were expensive. Others felt that the curricula were developed by educators who were cognizant of the cost factor and, consequently, suggested activities that utilized easily accessible and inexpensive materials.

All principals felt that time was a major constraining factor in their efforts to evaluate and acquire resources. Gross et al. (1971) had commented in their study that implementing staff had "neither the skill nor the time required to develop" materials on the job.

Principals often delegated this responsibility to their staffs. In most schools, after major common purchases were budgeted for, funds were allocated to staff, sometimes collegially, sometimes autocratically, and sometimes with some bargaining between the principal and his staff, as well as among staff members themselves. The process appeared to have worked amicably, though in one instance, a teacher commented that some staff members in her school were not too pleased with the process that existed in their school at the time of the interview. In all schools, inadequate financial resources were major inhibiting factors. Materials impacted upon implementation. Some principals modified their implementation strategies, delayed, or even abandoned some topics in response to the availability of materials. In short, material availability to quite some extent determined the course of implementation. This finding was not surprising as Clark et al. (1984), Fullan (1982), Gross et al. (1971), Lipham and Hoeh (1974), had commented extensively upon this type of problem. In fact, Leithwood and Montgomery (1982) noted that the failure of school districts to provide adequate resources in support of program improvement posed serious problems for principals. Studies done in Canada by Aoki et al. (1977), Clinton (1972), Crowther (1972), Downey (1975), and Simms

(1978) reported similar findings.

Question 8) What kind of bargaining goes on between principals and teachers?

Summary of Findings.

It was observed in the summary above that principals and teachers, as well as teachers themselves, were involved in bargaining practices for the allocation of resources. This was a normal practice and operated in every school. Principals also bargained with central office for resources, making trade-offs, getting something here or giving up something there. Principals made trade-offs with staff; occasionally, certain staff members were allocated additional funds for resources but in turn had to share these with colleagues, or if they were sent on conferences, on returning, they were required to provide an inservice and share their experiences with other staff. In all instances, such bargaining was made on a mutual basis and geared towards successful implementation of the program. Principals and staff, confronted with a radically different curricula that called for a major shift in methodology, and which, as in the case of the English Language Arts, was thought to be potentially more beneficial for students, felt that mutually agree to infringement of organization rules was

warranted. This type of agreement was reported in the organization literature (Blau, 1955; Burns and Stalker, 1961) and implementation literature (Manasse, 1985; Morris et al. 1982) as contributing to successful organizations. Such mutually agreed to decisions attest to the team spirit and collegiality operating in some of these schools.

Question 9) How does the new curricula fit in with other school programs?

Summary of Findings.

Five curricular characteristics - relative advantage, compatibility, trialability, observability and complexity - were found to be operating in this study. It was observed in Summary Two above, that principals found the newer curricula to be better than the old. In the piloting process, some modifications were made on the basis of observation and experience. Two of the characteristics, compatibility and complexity, were found to be operating with greater frequency mainly in the area of the English Language Arts and Computer Awareness. The biggest problem was in the area of the English Language Arts mainly because of the paradigmatic shift in philosophy and methodology. Berman and McLaughlin (1976) observed that where values and goals of the new program were not

congruent with those of the implementors, the innovation was likely to be symbolically implemented or not implemented at all. Werner (1981) agreed with the observation of Berman and McLaughlin. However, because of instructional leadership shown by principals (see Summary 4 above), the problem was alleviated. The Computer implementation faced both physical problems with the lack of electrical outlets or limited space, and academic problems with the lack of principal or teacher expertise. However, even with the above problems, principals and teachers showed remarkable flexibility and initiative in accommodating these changes for successful implementation, notwithstanding the structural difficulties and contrary research findings reported in the literature. Berman and McLaughlin (1976) suggested that where "structural complexity" is great, but is accompanied by strong central support, innovative programs are likely to be successful. This division did put a great deal of emphasis on the English Language Arts and Computer Awareness curricula, and this was perceived as such by principals; also, it is likely that a high sense of efficacy, collegiality, and positive climate in the schools contributed to the successful implementation of these programs in this school division.

Question 10) What are the effects of the new curricula on students and staff?

Summary of Findings.

The question of measurement of student effects has been problematic in the research literature. While this study focuses mainly on the process of implementation, the qualitative data provides enough information to allow an examination of student and staff effects.

Many of the characteristics, such as climate or collegiality have been reported as having positive results in the school effects research for example, Bossert et al. (1982), Purkey and Smith, (1983, 1985). It is reasonable to infer that the above characteristics in this study, similarly have positive impacts; that is, students have benefited from the implementation of revised and new curricula. Flanagan (1954) suggested the use of such a methodology as noted immediately above. All principals and teachers in this study stated quite emphatically that they felt the innovative curricula have had positive effects upon students' achievement and behavior; they appeared satisfied with the results. Students were observed to be reading better, writing more and speaking more; they were more outgoing and assertive with improved self-concepts. Some were thought to surpass many adults in computer literacy. Observations on student

effects do have a high measure of convergent validity within and across schools in this division. This factor, among others, indicated that the innovative curricula are being implemented quite successfully producing changes in student outcomes. Deep implementation was taking place, but to what extent needs further study. Bussis et al. (1976) noted that when educators portray deep feelings about curriculum, they are likely to transfer these feelings to students in their charge. Results from the school effects research produced similar findings e.g. Bossert et al. (1982), Purkey and Smith (1983). Those findings are consistent with the findings in this study.

Recommendations

The interpretive approach employed to investigate how principals undertake the process of implementing innovative curricula functioned well in providing rich, "thick", qualitative, but voluminous data that related to the purpose of the study. The design permitted sufficient flexibility for the researcher to make explorations that lent deeper insights within the broad aims of the study. As a result the use of Werner's framework for further research is recommended with modifications. First, the framework needs further refinement to eliminate redundant questions as was the case in a few instances in this

study. Second, the framework could be strengthened by the inclusion of more direct in school observations. This would enhance the degree of generalizability of the results, and provide a better "grounded" conceptual understanding of the change process undertaken by practitioners themselves, when innovative programs are introduced for implementation. As such, better management of the curriculum change process in schools and the task of schooling may be achieved.

One of the observations emerging from the study was that perceptions about curriculum, about children, about teaching and learning, and comprehension of the intents of the new curricula varied sufficiently and mediated the curriculum implementation process. Where principals and their teachers felt that curricula were flexible, easily "unpacked" in the service of the children as well as showing how learning takes place and why, "deep" implementation was assumed to be taking place. Where this was not the case, "surface" implementation was assumed. Further research, however, is needed to measure the extent of both "deep" and "surface" implementation for a better comprehension of the impact of such understanding upon the change process, and on the extent to which curricular intents are fulfilled. Principals worked constantly to minimize such variations through regular

negotiations with their staffs. Nevertheless, curricular adaptation were observed to be taking place. Werner's framework could therefore be strengthened by the inclusion of such variables as curricular adaptation, support services and evaluation.

Another recommendation coming from the study is directed to Ministries of Education and school boards that are responsible for developing curricula for implementation in schools. In all schools, principals and staff were unanimous in their agreement that too many curricula were introduced in too short a time. The major problem was one of "structural complexity" that simply overwhelmed all staff. Principals were forced to prioritize for the simple fact that their staffs could not implement all these revised curricula with equal depth. Parts of some of the curricula not prioritized, were in fact, not implemented or postponed. It is, therefore, recommended that too many innovative curricula should not be introduced all at once, but rather staggered to ensure fuller and deeper implementation. Furthermore, the development or modification of adequate structures for each new or revised curriculum in coordination with the entire school curriculum would greatly enhance the education improvement efforts.

Finally, the question of adequate resources needs to

be considered. Such resources include not only the material needed to carry out implementation, but training, the provision of time and money for visitations, conferences and more peer consultation. While such resources were available in this study, they were inadequate for the tasks at hand. Adequate resources must be made available for successful implementation to take place. Furthermore, when innovative programs are introduced, adequate time should be provided and directed towards the training of both principals and teachers prior to, and during the entire implementation phase. Programs should be concrete and specific, relating to actual classroom situations. Moreover, training for potential principals (currently undertaken on a limited basis in Manitoba), should be made available at centralized locations, in the theoretical, empirical and practical aspects of educational leadership and management theory, applicable to school situations. Training, as suggested by some principals, should ensure a sound grounding in the English Language Arts and other relevant curricular areas applicable to the elementary school. Training in curriculum development and implementation should constitute an important component of the training program of principals. Where potential leaders emerge from within the educational system, and where such

educational background is lacking, school boards and universities should provide training programs for the improvement of such knowledge and skills necessary for undertaking the principalship.

Such programs would enable the principalship to demonstrate successfully, the educational leadership necessary for the continuing improvement of the school program and the education process.

Conclusion

The principalship has emerged as a major focus of research. An interpretive approach utilized in this study provided rich, qualitative data that showed the principal as a crucial person in the curriculum change process, contrary to research findings that showed the principal being occupied with managerial tasks. In spite of such tasks and other constraints, the principals in this study showed great tenacity and determination in carrying through numerous innovative programs.

Priorizing curricula, prioritizing resources, utilizing quite adeptly the expertise of other change facilitators, providing for professional development and instructional leadership, or demonstrating initiative and providing the conditions for harmonious climate through collegial, participatory planning and decision making, principals in

this study apparently, were able to achieve a high level of implementation success. Such success that were achieved, quite frequently resulted from the negotiations and bargaining that took place between principals and their staffs. Perhaps, this is where Werner's framework could be strengthened to provide "thick" data on the concept of negotiated order - the often hidden and implicit interactions and processes operating, and which are so important to the implementation process.

A tremendous amount of resources, time and personnel have been expended in the development of curricula. Yet, in the final analysis, it is the principal and the teacher who determine and negotiate the implementation of these curricula. Whether the intents of these curricula are carried out or not, is often determined by these negotiations. It is therefore important that the concept of negotiated order be further explored and developed. A better understanding of how this concept operates may help in the improvement of theory, and subsequently, educational practice.

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Appendix A

February, 4, 1985
c/o Dept. of Ed. Admin.
& Foundations,
Faculty of Education,
University of Manitoba.

Superintendent of Schools,
Prairie School Division,
River Ave.,
Manitoba.
Dear Sir,

I am a graduate student in Educational administration at the University of Manitoba. The proposal for my doctoral Dissertation involves research in the area of principal's behavior in the process of curriculum implementation. The results of this study will provide understanding of the administrator's role in the process of curriculum implementation and school effectiveness. It would be of use also in the development of better selection procedures and for the improvement of administrator training programs.

The research project involves the study of an entire school division. Consequently, I will need to interview all the elementary school principals who are willing to participate. I will need to interview also a teacher selected at random from each of the participating schools. I am writing, therefore, eliciting permission and support from the Division in order to conduct this study.

Participants will respond to questions concerning their roles, actions, etc. as they go about implementing the new or revised provincial curricula. The interviews with principals will consist of one to two hour sessions. Each teacher will be interviewed for approximately one hour. Absolute anonymity to the Division and respondents will be guaranteed. All interviews will be scheduled during the period March-May of the current academic year.

On the completion of the project, I will provide the Division with a copy of the dissertation. I am willing to provide a workshop or discuss the results with your staff if requested.

Thank you in advance for your anticipated cooperation.

Yours respectfully,

K.P. Binda

Appendix B

Prairie School Division

Manitoba

February, 12, 1985

Mr. K.P. Binda
c/o Department of Ed. Admin.
& Foundations,
Faculty of Education,
University of Manitoba.

Dear Mr. Binda,

Your recent letter requesting permission to carry out graduate study research in the Prairie School Division in the area of the principal's behavior in the process of curriculum implementation, was presented to the Board of Trustees at its regular meeting held February 11, 1985. I am pleased to advise that your request was approved, subject to the approval of participating principals.

For your assistance, I am enclosing a list of schools and principals whom you should contact to obtain their agreement for this survey. If we may be of further assistance please do not hesitate to call.

Yours truly,

Secretary-Treasurer