AN INVESTIGATION INTO THE IMPLEMENTATION OF/COOPERATIVELY PLANNED RESOURCE-BASED LEARNING FROM THE PERSPECTIVE OF TEACHERS

A THESIS

Submitted to the Faculty of Graduate Studies and Research in Partial Fulfillment of the Requirements for the

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by

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ABSTRACT

This study investigates from the teachers' perspective how the teachers' experiences with cooperatively planned resource-based learning/teaching had influenced their use of this teaching method. The four schools studied were from a school system which had been encouraging its teachers to implement this teaching strategy for seven years. During that period Saskatchewan Education had also expressed its commitment to implementing this teaching strategy.

Since the emphasis in this study was upon the subjective meaning and the factors which affected teachers' implementation of cooperatively planned resource-based learning/teaching and the extent to which the teachers employed this teaching method, on-site semi-structured interviews were used to collect the data as well as participant observation in each of the school libraries.

Subjective meanings held by the teachers interviewed varied from commitment to the innovation to fear that the students would not learn anything if the teacher were to use this teaching strategy. The degree of integration of the innovation into the teaching repertoire, also, differed among teachers as well as among schools. Variation was found in the teachers' perceptions of the innovation itself, its meaning and demands, and school level factors. Administrative

support, teacher interaction and benefits to students were the school level factors which were particularly significant.

In each of the four schools, teachers who had implemented the innovation had plans for continuation. However, continuation was threatened in schools where there had been a principal change or would have a new principal in the new school term.

Findings from this study suggest that school systems which wish to achieve implementation of an innovation must provide leadership, encouragement and support at all levels. In addition, they must guard against threats to the innovation to ensure its continuation.

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CHAPTER ONE

THE PROBLEM

With the introduction of the Common Essential Learnings as well as new resource-based curricula by the Saskatchewan Department of Education (1987, 1988a, 1988b), teachers are expected to implement resource-based learning strategies. The implementation of cooperatively planned resource-based learning strategies had been an expectation throughout the past seven years in the school system in which this research was done. Since resource-based learning represented a major change in the use of the school library and the working relationship between the teacher-librarian and the teacher, the implementation of resource-based learning in all grade levels of these schools has been a gradual process. This study is an examination of this change process from the classroom teachers' perspective.

Background

Although all school libraries in the system had already been staffed by teacher-librarians for five years and some teachers and teacher-librarians had been using cooperatively planned resource-based learning techniques, a major initiative to implement this

teaching strategy began in November, 1982 when Ken Haycock, the library consultant for the Vancouver School system, and his wife, Carol-Ann, a practicing teacher-librarian, presented a workshop promoting the use of cooperatively planned resource-based learning teaching methods. The ideas presented in this workshop were adapted by the library consultant, the coordinator of library services and the Learning Resource Centre Advisory Committee and presented in workshops to the principals of the schools and to the teacher-librarians who did not attend the workshop. Following these workshops a major initiative began in the system to implement cooperative planning between teacher and teacher-librarian using resource-based learning strategies.

In 1982 the Ministry of Education in Ontario published the document Partners in Action: The Library Resource Centre in the School Curriculum which clearly articulated the meaning of resource-based learning and explained the roles of the teacher, the teacher-librarian and the principal in implementing this teaching strategy. After a copy of this document was purchased for each school in the system, principals were encouraged to use it as a guide to developing effective Learning Resource Centre (LRC) usage in their schools.

In 1983-84 the LRC Advisory Committee produced a learning skills continuum for K-8. This learning skills continuum outlined the sequential skills which should be incorporated into resource-based units taught at each grade level. In the fall of 1984 teachers and principals throughout the system attended related inservice sessions. All schools were expected to begin implementation after they had attended the inservice.

In the spring of 1985 the principals and teacher-librarians attended an inservice session on the School Library Needs Assessment (Meadley & Thompson, 1986) package which had recently been developed by the Curriculum Development Division of Saskatchewan Education. The needs assessment provided a framework for evaluating the level of usage which existed in the provinces school libraries and was developed to be used in conjunction with the Educational Development Fund. Many schools in the system used the needs assessment package to evaluate their school libraries and to plan ways to improve their effectiveness.

The Saskatchewan Association of Educational Media Specialists (now, Saskatchewan School Library Association), a special subject committee of the Saskatchewan Teachers Federation, published The 4th R: Resource-based Learning: The Library Resource Centre in the School Curriculum in 1986. Principals were

introduced to this document in the fall of 1987 and were encouraged to promote resource-based learning in the schools.

Saskatchewan Education published Resource-Based Learning: Policy, Guidelines and Responsibilities for Saskatchewan Learning Resource Centres in November, 1987 and Learning Resource Centres in Saskatchewan: A Guide for Development in March, 1988 which explained the role of the Learning Resource Centre in the core curriculum.

In August, 1988 Saskatchewan Education published Understanding the Common Essential Learning: A Handbook for Teachers. This document identified the importance of using cooperatively planned resource-based learning in developing students who could take responsibility for their own learning and supported the initiative of the school system studied. Since this school system first began to implement cooperatively planned resource-based learning, much more emphasis on this teaching strategy has developed throughout the province and the country. The system continues to work toward full implementation of resource-based learning in all of its schools by providing inservice sessions to administrators and teachers. In 1989 a workshop on resource-based learning was held for vice-principals and their teacher-librarians. To further emphasize the

importance of implementing resource-based teaching/learning strategies, this system has included the instructional technique in the developmental supervision of teachers. By including in developmental supervision the assessment of teachers' use of this teaching strategy, the school system is indicating its expectation that cooperatively planned resource-based teaching will become part of a teacher's instructional repertoire.

In addition, during the 1989-90 term teachers and teacher-librarians attended inservice sessions focusing on the new social-studies and health-lifestyles curricula. Since these new programs are based upon resource-based learning strategies, the inservice again emphasized the instructional partnership between teachers and teacher-librarians as outlined in the Core Curriculum and the Common Essential Learnings (Saskatchewan Education, 1988a, pp. 50-57).

Statement of the Problem

The purpose of this study was to investigate from the teachers' perspective how teachers' experiences with cooperatively planned resource-based learning had influenced their use of this teaching method. The results from this research would enable administrators to plan future change strategies to encourage more

teachers to adopt resource-based learning and cooperative planning techiniques.

The following questions, based on implementation research (Fullan, 1982; Miles, 1983; Huberman, 1983), were used to investigate the experiences of the teachers:

1. What subjective meanings about resource-based learning did the teachers hold in terms of required changes in beliefs, materials and teaching strategies?
2. To what degree have resource-based learning techniques been integrated into their teaching repertoire?
3. How did various factors affect the implementation of resource-based learning strategies?
4. What are the teachers' plans for continuing to use resource-based learning techniques in 1989-90?

Definition of Terms

Resource-based learning/teaching is a method in which teachers and teacher-librarians cooperatively plan and teach units of study which involve students in a meaningful use of a wide variety of print, non-print

and human resources (Ontario Ministry of Education, 1982; SAEMS, 1986 and Saskatchewan Education, 1988).

Saskatchewan Education (1988b) defined resource-based learning as having two sections: 1) a learning skills continuum component and 2) a cooperative planning and teaching component. The learning skills continuum is a set of processing skills used to reach certain designated learning goals. These skills are taught within the context of a unit of study in which the student can practise the skills.

In cooperative planning and teaching the teacher and the teacher-librarian work together as partners in planning a unit of study which incorporates a variety of resources into the curriculum. The teacher brings expertise in the content area and the learning needs of her/his students and the teacher-librarian provides expertise in resources. As partners, the teacher and the teacher-librarian plan, teach and evaluate the unit of study.

The operational definition for this study is that resource-based teaching/learning is an approach which involves a teacher and teacher-librarian in cooperatively planning and teaching a unit incorporating a variety of print and non-print materials. Any study skills required are taught within the context of the unit. The terms resource-based

teaching and resource-based learning are used interchangeably throughout this study.

Significance of This Study

Saskatchewan Education has clearly delineated its expectation for the use of cooperatively planned resource-based learning in Understanding the Common Essential Learnings (Saskatchewan Education, 1988a, pp. 50-57) and in Learning Resource Centres in Saskatchewan (Saskatchewan Education, 1988b). With the implementation of the Common Essential Learnings in Saskatchewan, administrators in schools throughout the province will be encouraging all of their teachers to incorporate resource-based learning strategies into their teaching repertoire. An understanding of what influences teachers to adopt and become committed to the use of resource-based learning will provide administrators with possible strategies for further implementation in their schools.

Assumptions

One of the assumptions of this study is that the information received from the teachers interviewed was valid. The study assumes, too, that teachers' responses were grounded in their own subjective meaning of the change. That is, their responses reflected what resource-based

teaching/learning strategies meant to them in terms of the learning of their own students and the work involved in using this strategy.

Limitations of the Study

This study took place during the month of May, 1989. Since the end of the school term was approaching, teachers' thoughts about resource-based teaching/learning may have been different than they would have been at another time of the year. They were able to reflect upon the ways they had used cooperatively planned resource-based learning throughout the year, to access their successes and failures, and to consider their plans for using it in the coming year. The willingness of the teachers to be open and to share their feelings about resource-based teaching/learning was another limitation of this study. Some teachers may have been unwilling to share their reasons for not using resource-based learning since it was a system expectation that they would be incorporating it into their teaching strategies.

Delimitations

Four schools from the same school system were involved in the study. Each school had a full time teacher-librarian in the school which limited the study to schools of a population of 350 students or more.

Schools with a full time teacher-librarian were chosen because since some schools with a half time teacher-librarian do not have a library technician, the teacher-librarian is often forced to assume more of a technical role in the LRC.

One week was spent in each school during which teachers in grades three, five and eight were interviewed. In order to interview teachers from the three different levels within the school, these grades were chosen. Interviews were also conducted with the teacher-librarian and the principal in the school.

Overview of the Thesis

In this chapter, background information about the problem has been delineated as well as the problem and the questions used to gain insight into the problem. Definitions of terms, the significance of the study, assumptions, limitations, and delimitations used in the study were also presented.

Chapter II reviews the literature relevant to the problem of this study, while Chapter III describes the design and the research methodology that was used. Chapter IV includes the presentation and analysis of data from the study. Chapter V, the final chapter, is devoted to a summary of research findings and implications for practice and further research.

CHAPTER TWO

REVIEW OF THE LITERATURE

In this chapter the literature relevant to the stated purpose of this study is reviewed. The first section focuses on resource-based learning/teaching, the second section surveys change literature related to implementation of an innovation, and the final section examines the teacher in the change process.

Resource-based Learning/Teaching

Meaning. The philosophical framework for the development and implementation of a resource-based program is cooperative planning and teaching between the teacher and the teacher-librarian (Haycock, 1988). Cooperatively planned resource-based teaching contributes another teaching strategy to the teachers' repertoire. The Saskatchewan School Library Association (1989) document The School Library and Cooperative Planning stated that "cooperative teaching and planning provides the process for translating resource-based curriculum concepts into practical learning experiences for students" (p. 3).

Steps in Resource-based Teaching. Loertscher (1988) indicated that the resource-based teaching/learning method is comprised of four steps. The first step occurs when the teacher shares unit objectives with the teacher-librarian

and is willing to revise these objectives as needed. Haycock (1988) believed that "planning operationalizes the cooperative partnership" (p. 31). She explained that planning is a priority for which time must be set aside. When a scheduled planning time occurs after an initial contact, according to Haycock, there is "think time" for both partners to prepare for the planning session.

Preparation is the second step in the resource-based teaching/learning method. During this stage, materials to be used are selected, the activities to use those materials are prepared, and the product to be created by the students is determined. The teacher brings knowledge of the students and knowledge of the content area to the planning session while the teacher-librarian contributes knowledge of the resources and knowledge of the information skills (Haycock, 1988). During the preparation stage, the teacher and the teacher-librarian establish the minimum expectations for the processes of gathering information, recording and presenting information to insure success for all students; however, more capable students will be expected to work beyond the minimum expectations to reach their own potential.

Haycock (1988) warned that teachers who are inexperienced in using cooperatively planned resource-based teaching sometimes believe that their responsibilities end once the planning stage is completed. If the teacher-librarian is also a novice, s/he might assume full

responsibility for the preparation and teaching of the unit after the planning stage. If information skills and resource centre experiences are to be integrated into the curriculum, it is essential that the teacher and the teacher-librarian remain partners throughout the unit. Although the partnership may not be shared equally, to be effective it must have been shared.

The third stage of a cooperatively planned resource-based unit outlined by Loertscher (1988) is the teaching of the unit. In some cases the teacher and the teacher-librarian teach as a team. At other times parts of the unit will be taught individually by either the teacher or the teacher-librarian. Although the teacher-librarian does not spend the same amount of time teaching as the teacher, students are aware of the team approach being used.

Evaluation of the unit is the final stage of cooperatively planned resource-based teaching. Loertscher (1988) stated that during this stage not only are the students' learning activities evaluated but the teacher and the teacher-librarian evaluate the success of the unit, the effectiveness of the activities and the adequacy of the materials.

Variety of Media. Resource-based teaching, which is the opposite of the textbook/lecture method of instruction, employs a variety of media formats and technologies to achieve the instructional objectives (Loertscher, 1988).

Since resource-based teaching requires the use of a variety of media, the LRC has a direct impact on learning, whatever the topic of the unit, when this teaching method is used. In addition to the use of a variety of media, another feature of resource-based teaching is that it fits well with many models of teaching.

Prerequisites. There are several prerequisites for successful implementation of cooperatively planned resource-based learning. One requirement is a LRC timetable which is flexible to allow teachers and the teacher-librarian to schedule blocks of time for working on a unit of study which requires the use of resources (Davies, 1979 & SSLA, 1989). When the LRC is flexibly scheduled, a teacher can book his/her class into the LRC for an appropriate length of time to work on a cooperatively planned resource-based unit with the teacher-librarian.

In addition to a flexibly scheduled LRC, successful resource-based teaching requires a teacher who is willing to use a variety of media, a LRC containing enough resources to accommodate resource-based units and a teacher-librarian who is willing to work in partnership with teachers on cooperatively planned and taught resource-based units (Loertscher, 1988). In order to achieve a successful partnership, both partners must know and respect the other's skills, philosophy of education, and responsibilities (Ontario Education, 1982). The final requirement for

success is a cooperatively developed, sequential program for teaching learning and research skills necessary to use materials effectively (Ontario Education, 1982). These skills must be taught within the context of a meaningful unit of study.

According to Haycock (1985), the classroom teacher is responsible for the effectiveness of resource-based learning. If the teacher chooses not to involve the teacher-librarian in planning and teaching of research and study skills as outlined in curriculum guides, s/he assumes the responsibility for the development of those skills in her/his students. However, when the teacher chooses to work cooperatively with the teacher-librarian, not only the planning but the preparation and implementation of programs are shared by both partners.

Advantages. Several advantages to using cooperatively planned resource-based teaching techniques have been identified. Loertscher (1988) indicated that the most important advantage for the student is the increased learning which occurs when resource-based teaching strategies are employed. Other advantages for the student mentioned by Loertscher are that a variety of learning styles are accommodated, the student's thinking ability increased, creativity and inquiry grew, and the students showed more interest in learning. Haycock (1988) added that

cooperatively planned resource-based teaching benefits the student in the following ways:

> (a) maximizes the use of all school resources to the best possible effect for the student population;
> (b) ensures the integration of information skills instruction and application, developmentally, across the curriculum;
> (c) guarantees successful learning experiences for all children (p. 32).

Loertscher (1988) believed that the teacher who employs resource-based teaching strategies enjoys certain advantages as well. Using this teaching technique adds variety to the teacher's day, provides the opportunity for the teacher to share teaching responsibilities with the teacher-librarian, allows the teacher an opportunity to help the students who are having difficulty with regular classroom procedures and offers the teacher the opportunity to be creative.

Disadvantages. Several disadvantages of using cooperatively planned resource-based teaching strategies were also pointed out by Loertscher (1988). Time is always in short supply in most schools and cooperatively planned resource-based teaching requires planning time. Since cooperatively planned resource-based learning requires creativity, imagination, flexibility, and cooperative strategies, it is a more demanding method than the traditional textbook/lecture method. Some teachers might consider this method more work and "risky" and prefer to continue using the traditional textbook approach which

provides security, is usually easier to organize and allows more control over students and content.

Factors. Haycock (1985) contended that the factors which influence teachers to use cooperatively planned resource-based teaching methods are "involvement in program planning with the teacher-librarian and team teaching, inservice programs organized by and/or put on by the teacher-librarian, administrative support for the library program, and the personality and qualifications of the teacher-librarian" (p. 104). He viewed the teacher-librarian's role as that of an initiator and change agent who attempts to get teachers to change their teaching strategies and to adopt cooperative planned resource-based teaching methods.

However, Brown (1988) asserted that such a view is a naive notion of change and that to expect the teacher-librarian in a school to be responsible single-handedly for changing teaching practices in a school is unrealistic. She emphasized that this is a complex change which requires the active support of the principal as well as total staff involvement. Because, according to Brown, cooperatively planned resource-based teaching requires not only a change in materials used but a change in teaching strategies, it requires a change in teachers' beliefs about the way students learn. Teachers, who believe that students only learn when information is presented to

them, would experience difficulty using this teaching strategy. To get these teachers to change might require showing the teacher that students could learn when the teacher is the guide and creator of the learning experience rather than the information giver.

Brown (1988) also indicated that for teachers to implement this teaching strategy would require teachers to view teaching not as an isolated activity where they have complete autonomy in their classroom but as a partnership with the teacher-librarian and the LRC as an extension of the classroom. She also suggested that for many teachers planning exact objectives for a learning activity to meet particular needs would be a new experience, and if cooperatively planned resource-based was to be successfully implemented, these teachers require support.

Summary. Cooperatively planned resource-based teaching is a complex change for teachers because it requires them not only to change their beliefs about how students learn but to change their teaching materials and teaching practices. In addition to these changes, a teacher must also work in partnership with the teacher-librarian which requires them to relinquish some of their classroom autonomy. Since cooperatively planned resource-based teaching/learning is a complex change, the change process plays an important role in determining whether it is fully implemented.

The Change Process

When the individual is involved in actual change s/he experiences loss, anxiety and struggle (Fullan, 1982). The individual must face these feelings whether the change is prescribed or intentional. In the technological age individuals regularly encounter change in their lives and are forced to adjust to it. Whatever the source of the change, the individual must work through a period of ambivalence and uncertainty. Through successful change the individual develops a sense of mastery, accomplishment and individual growth. Fullan (1985) suggested that through this process of change individuals alter their way of thinking and doing, develop new skills and find meaning and satisfaction in what they have accomplished.

Three phases of the educational change process have been identified by Berman & McLaughlin (1976) and Fullan (1982). The adoption phase encompasses the steps leading up to and including the decision to make a change. It involves planning, locating resources, and choosing the projects to be supported. The first attempts at putting the change into practice is the implementation phase. The implementation phase will be examined in detail since it plays a vital role in determining whether or not the innovation continues to exist. Institutionalization or continuation is the final phase. If institutionalization of the innovation occurs, it becomes part of the system; if it doesn't, the innovation

disappears from the system. Miles (1983) implied that institutionalization is the most difficult phase to achieve. Since institutionalization cannot occur if the implementation phase is unsuccessful, the threats to institutionalization which occur during the implementation phase will also be examined.

Implementation. When teachers endeavor to use a new idea, program or teaching technique, they are involved in the process of implementation. This innovation may be mandated by administrators or identified as a need by the teachers. A change may be prescribed in detail or evolve as teachers work with it. It may require unaltered implementation or teachers may have the freedom to modify it to fit their own classroom needs. Whatever the change may be there are certain factors affecting implementation which will serve either as facilitators or barriers. Fullan (1982) identified these factors as "characteristics of the change", "characteristics at the school district level", "characteristics at the school level", and "characteristics external to the local system". Waugh & Punch (1987) added "the strategies used to implement the change" as a fifth factor; however, in this paper the discussion of this factor will be incorporated into the first three characteristics identified by Fullan.

Characteristics of the Change. Need, clarity, complexity, and quality are four features of change which

have been found to affect implementation. Resource-based learning should be kept in mind as each characteristic is described in this section.

Fullan (1982) noted that the teachers' perceived need for the innovation will be influential in determining the success of its implementation. They are concerned whether the innovation addresses a particular need of their students, whether their students will be interested and whether they will learn using the advocated change.

Clarity about the goals and the means of achieving the change is another factor which influences the success of implementation. Fullan (1982) stated that when a lack of clarity exists, a major problem develops because teachers and administrators do not understand what the change means in practice. Crandall, Eiseman, & Seashore Louis (1986) emphasized that the implementer needs to know what is important, which parts are essential to the innovation and which parts can be adapted or deleted without it loosing its effectiveness. They stressed that identifying the essential parts of an innovation is much more difficult than one would intuitively expect. Loucks and Zacchei (1983) suggested that for teachers and administrators to know when implementation is complete, they should be aware of what it will look like, its main elements and what activities should be occurring in the classroom.

Another difficulty occurs when "false clarity" develops and teachers interpret the change in an simplistic manner. Fullan (1982) explained that when this happens, teachers do not fully understand what is involved in the innovation. The comment frequently heard about the Common Essential Learnings (Saskatchewan Education, 1988a), "We have always done that. This is nothing new." is an example of false clarity. Promoting a clear understanding of an innovation is essential if teachers and administrators are to be effective in achieving the anticipated change.

Complexity indicates the difficulty and extent of change required by teachers engaged in the implementation (Fullan, 1982). When the behavior required by the change is significantly different from the teacher's current behavior, Os/he may require training to learn the new skills (Crandall, Eiseman, & Seashore Louis, 1986). The authors agreed with both Fullan (1982) and Huberman & Miles (1984) that, even though complexity causes difficulties during implementation, a more complex change accomplishes more because more is being attempted. A school system must choose an innovation which is neither so extensive that it cannot be implemented without major distortion nor should it be so minor that teachers will not consider it worth the effort.

The "quality and practicality of learning materials, technologies, and other products" is the final factor of the

characteristics of change (Fullan, 1982). An innovation must measure up to the real world of the teacher and be useful in that world. Users of the innovation want to know whether it will help them and their students (Crandall, Eiseman & Seashore Louis, 1986). In Loucks and Zacchel's (1983) words the innovation needs to be "classroom friendly", which indicates that the change should be usable in a normal classroom setting. Even the most reluctant user of an innovation can be converted if the innovation is of high quality. Once implemented, the innovation must meet the needs of the teacher, and assistance must be provided on a regular basis until teachers have mastered the change (Fullan, 1985). Whether the innovation appeals to teachers as workable and useful may determine its success or failure (Crandall, Eiseman & Seashore Louis, 1986). Therefore, change agents must consider these characteristics when planning for the implementation of an innovation.

School District Factors. Characteristics of the school district level also act as facilitators or obstacles to implementation, according to Fullan (1982). The district's history of innovation attempts influences whether the proposed change is attained. If teachers have had several negative experiences with innovation, they will be unlikely to take another change seriously even though it may be an excellent idea or program. Parish and Aquila (1983) emphasized that change agents in a school must know its

organizational history and its culture before introducing an innovation if any change is to be realized.

The adoption process is another factor (Fullan, 1982). A carefully considered adoption plan is more likely to be taken seriously and followed through by principals and teachers than one which was not. Having teachers participate in the adoption and development of an innovation is not critical to effective implementation. Although teachers can implement change individually at the school level, district wide change cannot come about without the support of the central administrators. Teachers are not likely to take change seriously unless the administrators' actions exhibit their commitment to its implementation.

Staff development and participation is essential for instructing teachers how to understand and to use the innovation. Because, according to Fullan (1982), implementation involves a process of resocialization, it is essential that teachers are given time for interaction in which they can learn by doing. This interaction is critical to the development of any innovation. Since learning to use a new program or instructional technique is a process that involves an initial period of anxiety, small experiences of success early in the change process are important. For this teachers need initial training which provides demonstrations of the innovation and introduces the new materials followed by as much assistance as possible. Fullan (1985) suggested

that when teachers receive assistance, their mastery of the innovation increases as well as their commitment to it. Effective staff development and participation are critical to a successful change process.

The literature also stresses the importance of the local facilitator in the process of implementation (Fullan, 1985). Loucks and Zacchei (1983) described the role of the local facilitator as a "cheerleader" who builds commitment and gives continuing encouragement, a"linker" who provides outside expertise and a "trouble-shooter" who helps teachers solve any problems arising from the innovation.

The length of time in which the implementation is to occur is another factor. A time line which is neither too short nor too long, but is realistic, should be determined at the outset of implementation.

The community is another factor which must be considered. Although communities are usually not involved in an innovation, Fullan (1982) noted that an unpopular innovation can provoke a community into action. Before implementation begins, Fullan (1985) suggested that the system would be wise to make sure that the community and the parents are not opposed to the innovation. In some cases, parents should be involved in the planning and in instructional support roles for the innovation. When implementing a change, the characteristics at the school district level can influence its success.

School Level Factors. School level factors are critical to the facilitation or rejection of an innovation. The principal is one of the most vital factors. Although research indicates that the principal's instructional leadership role is key to the change process, it also asserts that there are very few principals who act as instructional leaders. Fullan (1982) proposes that principals have as much difficulty knowing how to implement their role as instructional leaders as teachers do in implementing new teaching expectations. Since principals have little, if any, training as instructional leaders, Fullan (1985) advocated that principals' needs are similar to teachers during the implementation period. They require continuing training and assistance, sharing in discussion time with peers, and ongoing efforts toward implementation in the school.

The recent literature emphasizes that principals must provide strong leadership if change is to occur. Huberman (1983) found that schools in which the principal exerted strong and continuous pressure on teachers were the schools where successful implementation frequently occurred. He advocated that if the principal wants particular results, s/he must "shape" them. Principals can play an influential part in the change effort by voicing and demonstrating commitment to an innovation and by providing continuing help and opportunities for interaction within a school (Fullan,

1985). When principals concentrate on the teacher's actions in the classroom, Cox (1983) noted that the teacher changes his/her teaching behavior and becomes proficient in the innovation. When principals concentrate on change in the school as a whole the innovation is institutionalized. Administrators must find or develop a practice which has a potentially good fit. After the change has been adopted, they must provide technical and institutional support so that the maximum number of teachers will implement it.

The way administrators announce a change and later the way they support it suggests how seriously the teachers should react in implementing it (Parish and Aquila, 1983). An administrator can provide direction by telling teachers, other staff and parents that the innovation is an important priority (Loucks & Zacchei, 1983). S/he can provide this direction by easing requirements for teachers in other content areas, asking teachers to make presentations to parent groups, spending resources on materials to support the program, monitoring classroom informally and formally to see that the innovation is being followed, providing help that teachers require, and, if necessary, requiring teachers to attend workshops they were not planning to attend.

Crandall, Eiseman & Seashore Louis (1986) noted five elements required to provide strong leadership in implementation: "absence of debilitating conflict; an effective, debugged innovation; continuity of leadership;

frequent reminders that successful and faithful implementation is important; and adequate resources and support" (p.40). The principal's leadership in promoting implementation indicates to the teachers whether the innovation is to be taken seriously (Fullan, 1982).

Teacher-teacher relationships is another school level factor critical to the change process. Since change requires resocialization and resocialization requires interaction, peer relationships play an important part in the implementation of an innovation. "Collegiality, open communication, trust, support and help, interaction, and morale" (Fullan, 1982, p. 72) are closely related to the development of supportive peer relationships. Fullan (1985) asserted that "getting people acting and interacting represents a major route to change (i.e., beliefs, new conceptions follow action more than they precede it)" (p. 402).

Sharing ideas is one means of peer support. Crandall (1983) recommended that since teachers rarely, if ever, have time to develop an innovation on their own, they are masters at emulation and imitation. Many teachers are willing to share their "trade secrets" with other teachers who in turn emulate them and pass the idea on to another teacher. Teachers readily adopt ideas used by colleagues they view as exemplary. Crandall recommended that principals adopt this sharing model for introducing a new program into their

schools. By involving a dynamic presenter who has used the program and who holds credibility among her/his peers, teachers are more likely to implement the new program. Guskey (1986) also stressed that providing teachers with opportunities for sharing and interacting provides teachers beneficial support.

A trusting atmosphere in which teachers feel free to communicate openly about their attempts at using an innovation and their doubts and concerns about their implementation will also help to build commitment to that change (Waugh & Punch, 1987). When a group of teachers are involved in discussion, they develop an understanding of how to use the innovation and actually revise ideas during the process. Guskey (1986) emphasized that teachers must feel free "to discuss their experiences in an atmosphere of collegiality and experimentation" (p. 10). Through these discussions teachers take ownership for new ideas (Crandall, Eiseman & Seashore Louis, 1986). An atmosphere of trust, interaction, support and sharing provide the environment in which teacher-teacher relationships can nourish the growth of an innovation in the school.

Although peer support and sharing among teachers plays an important role in effective innovation, the characteristics and orientations of the teacher are pivotal. Fullan (1982) believed that the attitude of the school and the school system in which teachers are teaching determines

how effective they will be in implementing a change, not their level of education or years of experience. However, the teachers' belief that all children can learn no matter what their circumstances is a characteristic which related positively to the teachers ability to effectively implement new programs and teaching strategies.

Waugh and Punch (1987) indicated that teachers are likely to weigh the personal cost of implementing an innovation. They will consider whether the benefits from the innovation are worth the time required for implementation. If teachers feel that they are being overwhelmed by the innovation and that it is creating far more work than it is worth, even though they were committed at the outset, they may loose interest.

The need for support is a common theme throughout school improvement and change literature. Providing support to implementing teachers is crucial for successful change (Fullan, 1982; Guskey, 1986). Crandall, Eiseman & Seashore Louis (1986) identified three support needs of teachers. In the effective domain teachers require moral support. Their needs in the cognitive domain are associated with the need to know what the innovation is all about, how it works and what it means to them. The teacher also has skill related needs. For a school to implement an innovation teachers must have these support needs met. In addition, they need continued assistance during the implementation phase until

they have effectively mastered the change and become committed to it. Guskey (1986) stressed that since change in teachers' thinking takes place after implementation and proof of students' improved learning, continued support after the initial training is vital. Crandall, Eiseman & Seashore Louis (1986), Crandall (1983) and Huberman (1983) found that teacher commitment developed after s/he was actively engaged in using a new practice or program. Commitment was not evident at the beginning of the implementation stage, but developed after the teacher had a chance to actually begin using the innovation. As teachers became more committed to the change, they mastered the innovation and it became part of their teaching repertoire (Crandall, Eiseman & Seashore Louis, 1986; Crandall, 1983; Huberman, 1983). Since teachers are usually directly involved in a process of implementation, the change agents must consider their characteristics and orientations in planning the change.

External Environment Factors. The external environment is the fourth major factor affecting implementation efforts. One dimension of this factor is government agencies which have been involved in program and policy adoption without understanding the process of implementation. Monetary assistance from government can positively impact upon implementation if the assistance is integrated with what is happening at the school level (Fullan, 1982). The

educational development funds provided by the provincial government for schools to implement programs of their own design which met the guidelines of the program is an example of how external assistance can be helpful.

When planning for implementation, the change agents must consider the characteristics of the change, the characteristics at the school district level, the characteristics at the school level, and the characteristics external to the local system (Fullan, 1982). Without considering the impact of each of these factors upon the change process, the innovation may not be as successfully implemented as was intended and institutionalization may not be realized.

Threats to Institutionalization

During the implementation phase threats to the innovation may develop which will prevent it from becoming institutionalized. Losing a key advocate can inflict a mortal blow on an innovation unless the change agents have protected the innovation by having the expertise and responsibility for it shared by several different people on staff (Loucks & Zacchei, 1983; Miles, 1983). The innovation can not only be destabilized by the loss of leadership but by new staff who have not been properly oriented. To overcome this, as many teachers as possible should be engaged in the change process. Administrators must guard

against these threats if the innovation is to be institutionalized.

Miles (1983) proposed that teacher-administrator harmony is another variable which is essential to institutionalization. Because of the stress involved in implementing a change, continual administrative support and direction is critical to overcoming the pressures and stresses experienced during implementation.

To avoid threats to institutionalization from environmental turbulence, Loucks & Zacchei (1983) recommended that the changes must be written into the curriculum guides or regulations. There must be budget lines established which will to some extent protect the innovation. To insure continuation of the innovation, Huberman (1983) emphasized that an innovation must become a regular part of training, budget and policy cycles. Enthusiasm for an innovation is not sufficient to ensure that it will permanently become part of the school. For institutionalization to occur, school administrators must shield an innovation from threats.

Miles (1983) developed a model illustrating the factors which act as support or threats during the implementation stages of an innovation. Using empirical research, the author examined the sites in "sites-by-variables, predictor-out come matrix to see how each contributed to high or low results" (Miles, 1983, p. 18). Figure 2.1

depicts the general model which was developed from this data using the most critical variables.

Figure 3. A Data-Grounded Model of Institutionalization

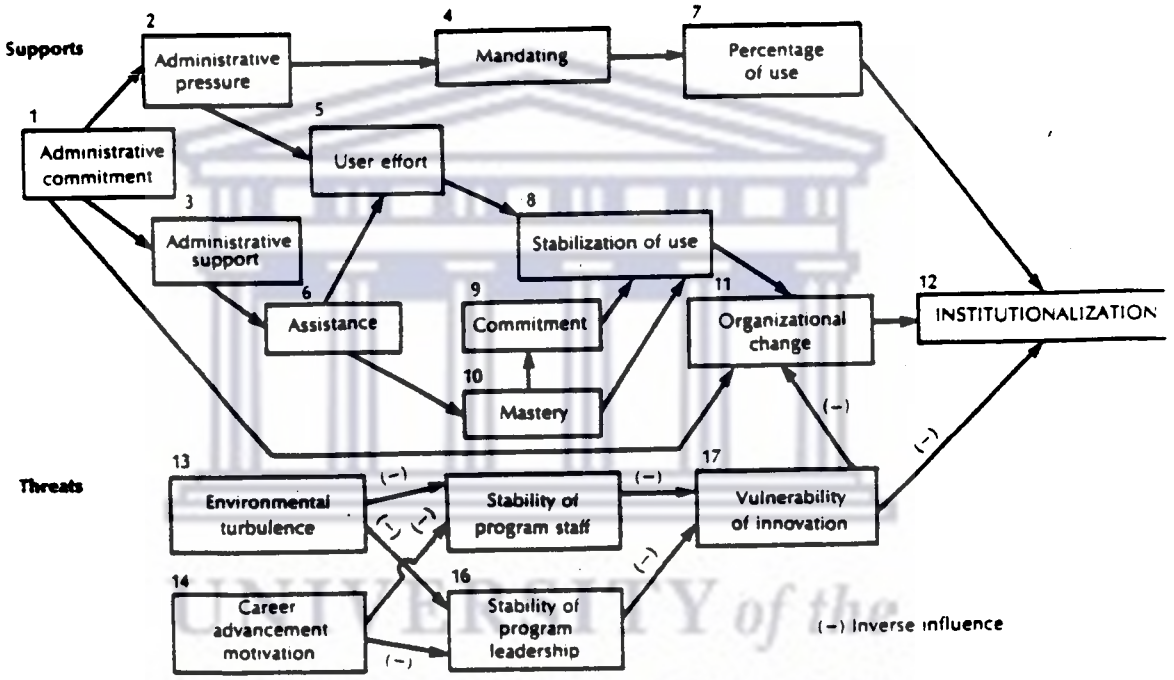

Figure 2.1 A Data-Grounded Model of Institutionalization

Note. "Unraveling the Mystery of Institutionalization" by M. Miles, 1983, Educational Leadership, 42(3), p. 18.

The Teacher in the Change Process

"Successful implementation of new practices is occurring at a high rate--and it is in large part due to the efforts of teachers" (Crandall, 1983, p. 7). During the implementation phase teachers experience changes in beliefs, teaching styles and materials (Fullan, 1982). Since change is a developmental process, all teachers do not pass through changes in beliefs at the same time nor do their skills in using the innovation develop at the same rate. In order to assess at which level a teacher is using the innovation and their concerns about using it, Loucks & Hall (1977) have developed instruments to measure the Levels of Use and the Stages of Concern about the innovation. The authors advocated using these instruments together to determine the needs of the implementing teachers and to provide individual assistance for meeting those needs.

An Innovation Profile can also be designed for a specific innovation (Leithwood & Montgomery, 1982). This profile differs from the Levels of Use by describing the unique behaviors associated with the new practice.

Levels of Use. The implementation of an innovation is not achieved simply by mandating the change. Hall, Loucks, Rutherford, & Newlove (1975) found that teachers varied immensely in their usage of

an innovation. They concluded that this implementation phase of the change was a process through which each teacher passed individually. Since the ways an innovation is used varies tremendously from teacher to teacher, the authors developed the Levels of Use chart for analyzing the developmental level of teachers as they learned to use an innovation. The Levels of Use chart contains not only the levels of usage but seven categories which represent the key functions employed by teachers in the process of change. These categories describe typical behaviors exhibited by teachers when they are working at a particular level of use. By using the Levels of Use chart, a researcher can determine the extent to which a teacher is using an innovation at any given point in time.

The Levels of Use concept is composed of eight developmental states and range from non-use to searching beyond the innovation for improved methods. Hall, Loucks, Rutherford and Newlove (1975) described the developmental stages as follows:

Level	0	Non-use	The user has little information about the innovation and is not involved with it.

Level	I	Orientation	The user is learning about the innovation and is considering using it.
Level	II	Preparation	The user is going to try the innovation for the first time.
Level	III	Mechanical Use	The user is implementing the innovation step-by step.
Level	IVA	Routine	The use of the innovation is stabilized.
Level	IVB	Refinement	The user varies the use of the innovation to benefit the students.
Level	V	Integration	The user is combining efforts with activities of colleagues to benefit students.
Level	VI	Renewal	The user re-evaluates the innovation and searches for further improvements which will benefit students. (p. 54)

Stages of Concern. Since change is an intensely personal experience, each individual moves through stages in his/her understanding and feelings about the innovation. Loucks & Hall (1977) suggested that in order to adequately help teachers during the process of

change it is necessary to identify where the teachers are in terms of their feelings and their behaviors. They found that teachers in the change process pass through similar stages to those described by Fuller (1969). The concerns progress from concerns about self, to concerns about the teaching task, to concerns about how the innovation will affect the students. Loucks and Hall (1977) discovered that these concerns directly affected teaching performance. The authors identified the following stages of concern:

0	Awareness	Teacher has no concerns is unaware of innovation's existence.
1	Informational	Teacher wants to know about the innovation and what is required to use it.
2	Personal	Teacher evaluates present teaching role and considers what changes would occur if the innovation were used.
3	Management	Teacher is concerned about organization and logistics.
4	Consequence	Teacher wants to know how the innovation affects the students involved.
5	Collaboration	Teacher attempts to relate her/his work with innovation to work of other teachers to improve student learning.

6	Refocusing	Teacher considers whether other innovations exist which would achieve the goals more effectively. (p. 18-19)

Loucks and Hall (1977) and Hall and Loucks (1978) advocated using the Stages of Concern and Levels of Use for assessing the kind of inservice which teachers need while involved in implementing an innovation. By using this method, inservice sessions could be individualized to fit the particular task and self needs of each teacher. Since ongoing professional development is essential to the change process, the Levels of Use and the Stages of Concern could provide useful information to the change agents planning the inservice programs.

Innovation Profile. Leithwood and Montgomery (1982) developed the Innovation Profile to describe a teacher's behavior from non-use to full use during the implementation of an innovation. This profile differs from Loucks and Hall's Levels of Use because it describes particular stages of development within specific dimensions of the change; therefore, every innovation will have its own unique innovation profile. Loertscher (1988) has developed a Taxonomy of Resource-Based Teaching which is an innovation profile for this teaching strategy.

Taxonomy of Resource-Based Teaching. In today's information age a teacher can no longer be the single

source of instruction but must be the manager of the total educational experience. Since the teacher must be willing to incorporate ideas from many sources, her/his teaching methods will also have to change to meet new educational challenges. The Learning Resource Centre and the teacher-librarian can play an important role in the teacher's instructional strategy.

The Teacher's Taxonomy of Resource-Based Teaching (Loertscher, 1988) indicates the eight levels at which teachers may be operating in relation to their use of the Learning Resource Centre.

1. Self-contained teaching.
   The teacher relies on texts and workbooks.

2. Teaching with a private collection.
   There is no interaction with the L.R.C.

3. Teaching with a borrowed collection.
   The teacher borrows materials from the Learning Resource Centre, the public library, or other sources for use in the classroom during a unit of instruction.

4. Using the teacher-librarian as an idea source.

5. Using the teacher-librarian and resources for enrichment of a unit.

6. Learning Resource Centre materials/activities are integral to unit content, rather than supplementary in nature.

7. Teacher/teacher-librarian partnership in resource-based teaching.

8. Curriculum development. (p. 23)

Working with the teacher-librarian, a teacher, no matter how excellent, can become involved in a instructional partnership which will improve her/his students' educational experiences. A teacher who forms a partnership with the teacher-librarian is no longer working alone in the isolation of her/his classroom. Since cooperative planning and teaching is a collegial approach, it can provide peer support and sharing to teachers who are changing their instructional techniques to incorporate resource-based learning.

The principal, as instructional leader of the school, can provide a climate which is conducive to a resource-based teaching/learning approach. S/he can promote policies and a atmosphere which encourages this instructional approach as well as arranging joint planning time and monitoring the results of these units.

Summary. Real educational change is not easily achieved and is even more difficult to establish as a permanent part of the school program. Three phases of the change process have been identified - adoption, implementation, and institutionalization. Of these three phases implementation is the most crucial to the continued success of an innovation. Without successful implementation, the new practice will never become a permanent component of the school system.

Four major characteristics of the change process and the factors associated with each of these characteristics were discussed. The factors related to the characteristics of the change must be adequately considered to insure successful implementation. The characteristics of the school district provide a second set of factors which must be considered in the implementation plan. Since principals and teachers are directly involved in the innovation, the school level factors play the most vital role in the implementation phase. Increasingly the literature refers to the importance of a strong leadership role for the principal if effective change is to be achieved. Finally, the external environment can also provide factors which influence the success or failure of an innovation. Because threats to institutionalization usually develop during the implementation phase, these threats and methods to guard against them were examined.

The teacher is most frequently in the front lines of the change process, and, if s/he doesn't make the required changes, the change will have no effect on the students' learning. The Levels of Use, Stages of Concern and Innovation Profiles were examined as a means of determining the extent to which the teacher

had implemented the change and their individual level of development in using it.

Change is obviously an extremely complex process which is affected by diverse factors. Only through careful planning by the change agents and continued support throughout the change process will effective implementation be achieved.

CHAPTER THREE

METHODOLOGY

In this chapter the setting and the methodology for the collection and analysis of the data have been described.

Setting

The school system involved in this study has been advocating the implementation of cooperatively planned resource-based learning since November, 1982. To encourage teachers to use this teaching strategy, a variety of inservice sessions have been conducted for teachers, teacher-librarians and administrators .

Four schools with a population between 450-600 students from the same school system were selected for this study. All four schools had been in operation for ten years or more and had an established, well-stocked LRC. Each school had a full-time teacher-librarian who was fully qualified by having taken the appropriate school librarianship courses. One teacher-librarian was in her first year in the school; another was in her second year in the school, and the other two had been in their schools for several years. Schools which had differences in the length of time the teacher-librarian

had been in the school were selected for study in an attempt to describe as many factors as possible.

Teachers in grades three, five and eight were the subjects for this study as well as the principal and the teacher-librarian. These particular grade levels were selected to represent the three different divisions of the elementary school.

Data Collection

Since emphasis in this study was on the subjective meaning and the factors which affected teachers' implementation of resource-based teaching/learning, it was necessary to be on site to see the total school context and to talk in depth to the teachers. This study, therefore, emphasized the holistic perspective which examines the larger picture and the interrelationships within it (Fetterman, 1982; Owens, 1982).

In order to ascertain teachers' subjective meaning of cooperatively planned resource-based teaching, the factors which influenced teachers' use of resource-based learning strategies and the extent of use of this strategy, semi-structured interview questions were employed. Bogdan & Biklen (1982) noted that the purpose for using interviews in qualitative research is "to gather descriptive data in the

subjects' own words so that the researcher could develop insights on how subjects interpret some piece of the world" (p. 135). The interview questions used for data collection are included in the Appendix of this study.

Since not all of the participants in the study were involved in resource-based teaching/learning units during the interviews, participant observation in each of the school libraries was designed to uncover additional data. The Learning Resource Centre (LRC) observations were used to assess the context in which teachers employed resource-based teaching/learning strategies which the researcher attempted to link with the themes emerging from the interviews.

During the observation the researcher looked for the following information:

1. How many planning sessions took place between teachers and the teacher-librarian?
2. Were the learning activities which took place in the LRC cooperatively planned?
3. Were classes coming to use the LRC without advance planning with the teacher-librarian? Were sufficient materials available for the project or were the students frustrated?

4. How did the students behave while working in the LRC?
5. Was the teacher-librarian organized, visible, flexible, positive, knowledgeable, (Loertscher, 1988, p. 16)?
6. Was there evidence of principal's support for the LRC and resource-based teaching/learning? Did her/his actions portray interest in the LRC as an integral area of learning in the school?

Owens (1982) stated that "qualitative inquiry seeks to understand behavior and human experience from the actor's own frame of reference, not the frame of reference of the investigator" (p. 7). Participant observation allowed the researcher to get acquainted with the frame of reference of the teachers.

Since data collection and analysis occurs simultaneously, data collection and analysis is an interactive process in naturalistic research. The analysis gives direction to the data collection by suggesting what to check, when to seek confirmation, and how to extend the data collection itself (Owens,

1982). Data collection was emphasized in the early stage of the study. As shown in figure 3.1,

> checking, verifying, testing, probing, and confirming activities will follow in a funnel-like design resulting in less data-gathering in later phases of the study along with a concurrent increase in analysis-checking, verifying, and confirming (Owens, 1982, p. 11).

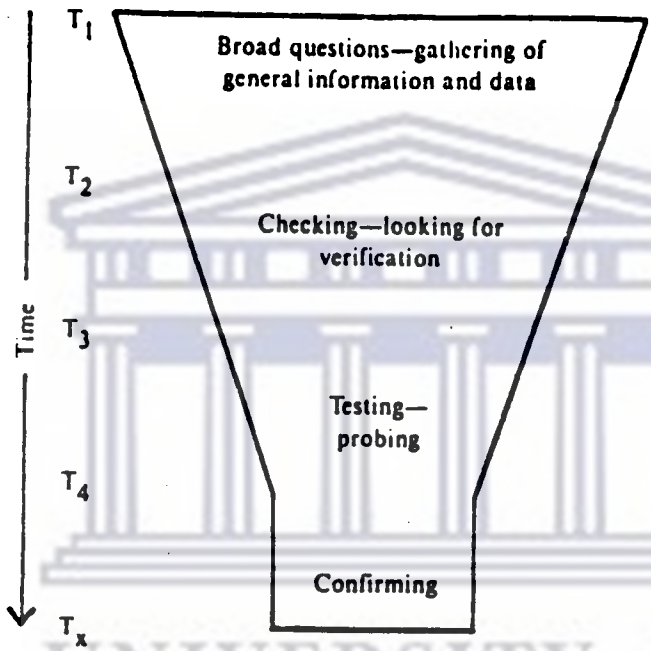

Figure 3.1. General outline of the plan for a naturalistic study.

Note: "Methodological Rigor in Naturalistic Inquiry: Some Issue and Answers" by G. Owens, 1982, Educational Administration Quarterly, 18, (2) p. 6.

Figure 3.2 shows that in the early stage of a study approximately 80 percent of the time and effort will be spent in gathering data and 20 percent will be spent on analysis. In the later stage of the research, approximately 80 percent of the time may be spent in

analysis while 20 percent is allotted to gathering data (Owens, 1982, p. 12).

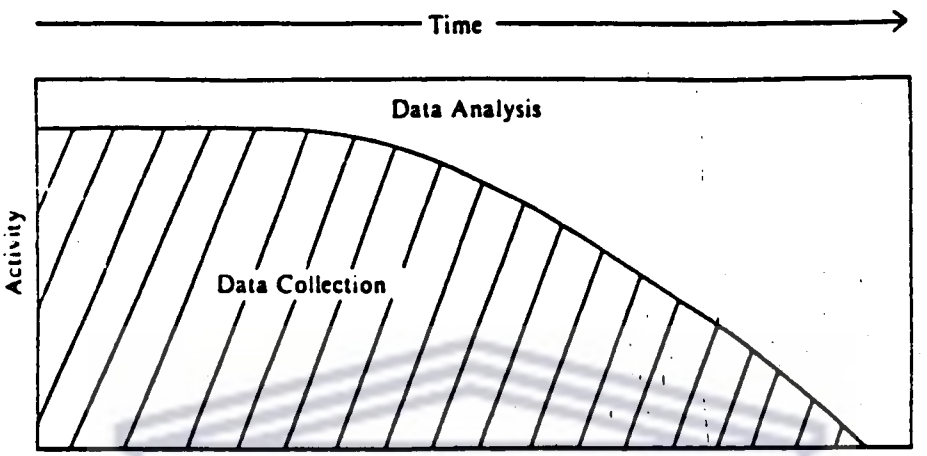

Figure 3.2. Typical pattern of data collection and data analysis in naturalistic study.

Note: "Methodological Rigor in Naturalistic Inquiry: Some Isues and Answers" by G. Owens, 1982, Educational Administration Quarterly, 18, (2) p. 6.

The Researcher

At the time of this study the researcher had completed twelve years as a teacher-librarian in the school system being studied. She had worked in two schools during this time and in each of these schools she worked cooperatively with teachers in planning resource-based teaching/learning units. She had been directly involved in the writing of the Learning Skills Continuum for the school system, and had served for three years on the Learning Resource Centre advisory committee.

Data Analysis

Miles and Huberman (1984) were used as a guide in analysis and presentation of the data obtained in this study. The following process was used:

1. All interviews except one were tape recorded.
2. The interviews were transcribed verbatim from the tape recording.
3. The transcribed interviews were returned to the interviewee for a member check.
4. All transcribed interviews were coded in search for a pattern.
5. A large matrix was created for each question and school using data obtained from the teachers interviewed.
6. From the large matrix a chart of verbatim statements was constructed for each school and each question.
7. Finally, a summary chart of verbatim statements was created.

Since accurate reporting of the data collected was the intent of this study, this procedure was followed for each of the research questions and for each of the schools involved.

Trustworthiness

Researchers have recommended methods to be followed in establishing the trustworthiness of a study (Guba & Lincoln, 1982; Owens, 1982). Transferability is one method suggested by the authors for gaining trustworthiness. By describing each school included in the research, provision was made for transferability.

Credibility is also a consideration in determining the trustworthiness of research. One method used to obtain credibility was triangulation. By interviewing teachers, principal and teacher-librarians in each school as well as observing in the LRC during the week spent in each school, credibility was obtained through triangulation. Another method to assure credibility was for the researcher to meet with the faculty advisor to discuss the data obtained and any biases which might have crept into the analysis of the data. In addition, the raw data collected during the study was kept without analysis for the utilization of any other interested researcher.

Another check for credibility in this study was a member check. All participants read the narrative report written from their interview and were asked to verify its accuracy. In addition, the faculty advisor was involved in comparing the raw data to the final narrative.

The trustworthiness of this study was based upon a one week observation period in each school, interviews with teachers, principal and teacher-librarian in each school and their feedback on the narrative which was acquired from the interview data. Triangulation of the data was obtained by interviewing these three different groups and by participant observation. Peer debriefing with the researcher's faculty advisor took place on three occasions regarding the reduction and analysis of data. In addition a full description of each school in the study is provided. The assumption was that this study would approach an accurate description of the reality.

Consideration was given to ethical guidelines recommended by the Social Sciences and Humanities Research Council of Canada. Permission was granted by the school system for the conduct of this research. Individuals were given a choice about participation and each checked transcripts of interviews which they had given. Throughout the study pseudonyms were used for the school system, for schools and for individuals. Report of this study will be public but raw data, including tapes and notes, will be destroyed.

CHAPTER FOUR

PRESENTATION AND ANALYSIS OF THE DATA

In this chapter the research data obtained are presented and analyzed. Since the school's context was a major consideration in this research, the data are organized by school. Each section includes a description of the school where the research took place as well as the information obtained through participant observation during the data collection.

The interview data are presented in tables which are organized by the grade level taught by each teacher, beginning with Grade 3 and ending with Grade 8. Verbatim statements typical of each teacher have been reported directly in the language used by the interviewees. Where there is a blank space in the table, no comments were made by the teacher interviewed. Data obtained from the interviews with the teacher-librarian and the principal are included in the discussion of each of the tables.

Summary statements for each of the research questions have been formulated for each of the schools based on data obtained from interviews, observations and print materials. An overall comparison of the schools studied and their relation to the elements of

the change process are presented following the discussion of the individual schools studied. Included in the final summary is a discussion of the most influential positive and negative factors to cooperatively planned resource-based learning strategies as expressed by the teachers interviewed.

LAKEWOOD SCHOOL

Context

Lakewood School had an enrollment of 602 and a teaching staff of 32 which included a music teacher, a resource-room teacher and other specialists. The principal was in her first year in the school.

The school had originally been designed as an open-area school, and the Learning Resource Centre was located in the centre of the school. The LRC had four large entrances which could not be closed off by doors. Since there were no doors and the walls were open at the top, noise from the hall which surrounded the facility occasionally interrupted work occurring in the LRC.

In addition to a full-time teacher-librarian there was a half-time technician and a corps of parent-volunteers who regularly helped out with shelving of books and other jobs as required. The

parent-volunteers spent a half day each week working in the LRC.

The LRC had a busy atmosphere, even in the first week of June, as students came individually and in small groups to exchange books and to use materials. Teachers remarked on several occasions that it was a shame that the visit took place so late in the year because the LRC was not busy like it was during the regular part of the year. The technician remarked about how quiet the LRC was compared to the rest of the year.

There were a variety of interesting displays in the LRC. A display of student work and materials used by the Grade 5 students who had studied the Royal Canadian Mounted Police in social studies provided an example of a resource-based learning project.

Since the painting of the school took longer than was expected, the visit to Lakewood School was delayed until the first week in June. Consequently, because teachers and the teacher-librarian were preparing for the end of the year, no planning sessions occurred during the week the researcher spent in this school. However, one Grade 4 teacher came to discuss the booklets on light which students had produced in a resource-based learning unit. The teacher was concerned about evaluation of the booklets and asked

the teacher-librarian's advice. The T-L said that she usually planned with teachers before school or at noon hours because teachers were usually too busy with other things after school.

In spite of the time of the year, there were several cooperatively planned resource-based units in progress. One of these was with a group of Grade 2 students who were learning how to create a webbing for research on a Canadian animal of their choice, how to locate materials, and how to make notes from the materials to fit their webbing topics. A Grade 3 class was studying folktales using a variety of different versions.

No classes came to the LRC without advanced planning to do resource-based learning projects. However, two Grade 7 classes came to use the facility for a free reading period. The LRC was organized using flexible scheduling.

The students were generally well behaved as they used the LRC. On one occasion a grade five class came to exchange books without their teacher and disturbed the teacher-librarian who was teaching another class at that time.

The teacher-librarian remained visible and active throughout the week. When the Grade 3 teacher doing the folktale unit required help in locating materials

for the unit, the teacher-librarian was willing to help. Throughout the week she frequently assisted teachers in a variety of ways. The resource-based units which she was involved in teaching were well organized and showed her to be knowledgeable about how to conduct the units. As she worked with the Grade 2 students doing their research, she was both supportive and positive with the students.

The principal who was seen frequently around the school never stopped to observe the learning activities occurring in the LRC or to discuss anything with the teacher-librarian. The vice-principal who stopped to discuss a unit on which the teacher-librarian was working showed some interest in the LRC.

Views of the Change Process

Two of the five teachers interviewed about their usage of cooperatively planned resource-based learning/teaching techniques were new to the school in the past year. Sharon joined the staff of the school after Christmas and the Bob was new to the school in September. The teachers interviewed exemplified the usage of cooperatively planned resource-based learning strategies witnessed by the researcher in Lakewood LRC.

Meaning - beliefs. Table 4.1 identifies the beliefs which the teachers held about the innovation.

Three of the teachers were strong supporters of cooperatively planned resource-based teaching; however, Sharon suggested that the type of class which she had helped to determine how much she would use resource-based teaching methods. Ruth and Bob felt that the lack of time limited their ability to use the innovation.

Table 4.1

Meaning - Beliefs

Connie	The only weakness is not having enough time with the teacher-librarian in a school this large. The T-L is too busy, just too busy. If you are really into it like myself, this year I had to cut down, but last year...it was amazing to see the growth those kids made. The kids are missing out if the teacher does not use this.
Liz	I would like to use resource-based learning more than I do but then there are other teachers also. I don't feel that I should be using the T-L all the time whereas some other people like to use her as well.
Ruth	The time factor is a problem. So little time in the school year because we have time away from teaching, i.e. the half planning days. We have less time every year.
Sharon	Resource-based learning is so creative and not boring ...I can use it with a variety of different grade levels. The students can use it as they go into higher levels of research. It is a good way of learning. It depends a lot on the situation each year how well you can implement it. I have an extremely difficult class this year so it has been limited...It has to do with the situation.

Bob	Teachers feel that all these things are added and nothing ever seems to be subtracted. The time constraints on teachers are just too great. People see the value of it and can't incorporate it because it is too much.

The teacher-librarian believed that teachers who were not using resource-based teaching methods had not seen the excitement and potential of using this teaching strategy. Another reason some teachers did not use this technique she felt was "the lack of security with how to go about it. They don't want to show their inexperience even to the teacher-librarian." She stated that she had never lost a teacher once s/he had seen the potential of working with another person and the benefits to the kids of using this teaching strategy.

The principal believed that when teachers used cooperatively planned resource-based teaching, they became more aware of the resources in the LRC and of how to use them. She also thought that the teacher-librarian provided the teacher with a different perspective on unit planning. The one drawback for teachers in using this technique, identified by the principal, was the limited amount of time which the teacher-librarian had to work with each teacher. Once teachers were committed to this innovation, there was

no way that the teacher-librarian could work with each teacher as much as each teacher would like. Several teachers also mentioned this problem.

Meaning - materials. As shown in Table 4.2 Connie, Liz and Sharon all expressed great enthusiasm for how trade books could be used in resource-based learning activities. They felt that the variety of materials available for resource-based learning made it an attractive teaching strategy. Bob indicated that the LRC lacked materials to support the social studies program. The principal emphasized that "the big spin-off is for the kids who then see that learning is not a textbook or not the encyclopedia. That to learn there are lots of other things."

Table 4.2

Meaning - Materials

Connie	The books they come into contact with that they probably wouldn't.
	When you go into the LRC the students can show you where the books are that they used prior to that...
Liz	Students use more trade books not just for pleasure reading but to get information out of.
Ruth	
Sharon	The range in your classroom determines how you are going to be teaching. The resource-based learning helps that way because you can find materials at the student's particular grade level.

Bob	I have used the resources in the bibliography by ordering outside of the school more than using the stuff in here. Some of that stuff isn't here. A lot of it isn't.

Meaning - teaching practices. Table 4.3 shows that all the teachers except Bob noted a change in their teaching practices resulting from the innovation. The teacher-librarian explained that teachers were slowly "getting away from so much talking to more activity centered learning." She also indicated that there was less lecturing and copying off of the board with the change in teaching methods.

Table 4.3

Meaning - Teaching Practices

Connie	One major difference is just the awareness of the skills that I am teaching the children now. Before, it was just facts, facts, facts.
Liz	It is nice to work with somebody else and sort of bounce the ideas off each other. You have to plan well in advance to book your time into the LRC, Somebody else may beat you to the time you want.
Ruth	With resource-based learning you can do a wider variety of things - groupings, each person can do a different section, etc. There can be problems when the T-L and the teacher have different expectations. Some students behave badly for the T-L.

Sharon	...more and more curriculums coming out are resource based...
	Students can learn to gather information and that is the innovation when we talk about CORE - skills rather than just memorization of facts. There is more a love of learning and more of an individualized approach.
	How do you grade somebody? Now people are always talking about being accountable.
Bob	People aren't always compatible teaching partners.

Integration into repertoire. The teachers interviewed at Lakewood School were working through different levels on the Taxonomy of Resource-Based Learning. From her comments shown in Table 4.4, Connie seemed to be working through level seven of the Taxonomy of Resource-Based Learning since she and the teacher-librarian often worked as partners in resource-based teaching.

Liz had made materials from the LRC integral to her units of study and at times worked with the teacher-librarian on these units. On the Taxonomy, Liz was working through level 6 and might at times even be working at level 7.

In the two or three units a year which Ruth planned with the teacher-librarian, she appeared to be using resource-based teaching methods through level 6 of the Taxonomy. She indicated that learning resource

centre materials were integrated into the RCMP unit and the biography unit.

Sharon's use of resource-based teaching methods had been limited at Lakewood School; however, she indicated that she had worked in close partnership on social studies with the teacher-librarian in her former school. Judging from her comments, she normally has worked through level 7 on the Taxonomy.

Bob's level on the Taxonomy was difficult to assess. He did mention that he used the LRC for research without involving the teacher-librarian except on some occasions for a review of research techniques. In his former school, he had used the teacher-librarian as an idea source. Since he did use library resources and occasionally worked with the teacher-librarian for enrichment of a unit, he might be working through level 5 of the Taxonomy.

Table 4.4

Integration of resource-based Learning Techniques

Connie	I try to incorporate the LRC into as many themes or teaching strategies as possible. The T-L and I work quite closely together. We'll plan out a theme...Then we will decide what we are going to do, who is going to do it. Usually we start out with a webbing and play it from there. We go through research skills that we want the children to know. Pretty well state out our objectives of what we want them to get from this teaching.

Liz	I plan a few cooperative units with the T-L. I do a lot of theme teaching. I try to integrate language arts, social studies and science all together. If I feel that there is a need that they can work on a research project, or some skill I would like to teach them I'll go to the T-L.
Ruth	This year the T-L did a RCMP unit with all Grade 5 students which I had planned with her several years ago. The T-L and I cooperatively planned a biography unit on famous Canadians. In other years I have done a science unit on light.
Sharon	This year it has been limited being new to the school at Christmas. In the other school it was basically in social studies because we were using the new social studies curriculum which is resource-based. We were both working together on that. I thought it was excellent what we were doing.
Bob	I use the T-L as a resource. I guess we did collaborate on a unit early in the year and I found that she could present something on it so she did. I can't remember what it was now. She reviewed research techniques as we got to certain projects. I haven't done any actual unit planning with her.

Since a teacher and teacher-librarian must be working at Level 6 or beyond to be doing cooperatively planned resource-based teaching, the levels of use for these teachers also varied. Connie who also incorporated a lot of group strategies into her resource-based learning units had reached the

refinement level. Liz, Ruth and Sharon were operating at the routine level because they had certain units with which they planned to use resource-based teaching each year. Since Bob had not attempted to work on a cooperatively planned resource-based unit, he was still at the non-use level.

Factors - characteristics of cooperatively planned resource-based learning. Various factors affected the implementation of cooperatively planned resource-based teaching in Lakewood School. One of these factors was the characteristics of the innovation. These characteristics included the teacher's perceived need, the complexity of the change required, the clarity of the innovation and the quality and practicality of cooperatively planned resource-based teaching methods.

Table 4.5 presents the responses of the five teachers in Lakewood School to the characteristics of the change. Three of the teachers perceived a need to use cooperatively planned resource-based teaching. Connie felt that she should be using this teaching strategy. While piloting the new whole language program, Liz also found that using resource-based learning techniques met her needs. Sharon, who saw herself as innovative, was always looking for new teaching methods which would enrich her teaching. Bob did not feel a need to try using cooperatively planned

resource-based teaching because he already had his teaching plan in place.

Connie and Sharon responded positively to the innovation's quality and practicality. Connie indicated that she found the direction of her teaching to be much clearer when she used this teaching technique while Sharon found it an exciting way to teach.

Both Ruth and Bob were less positive about the quality and practicality of using cooperatively planned resource-based learning. Ruth indicated that it slowed her down while Bob felt that it just took too much extra effort to plan with the teacher-librarian.

Table 4.5 Factors

Characteristics of Cooperatively Planned Resource-Based Learning

Connie	Just being more aware of where you are going - your objectives, your expectations. It's a lot more clear now. It's not like you are treading through sort of apprehensively, not really knowing what you are doing and where you are going. Having a T-L to help you with that - also working together with someone. The more workshops I attended and the more information I got on this, I thought, "Gosh, I should be doing this."
Liz	I felt a need to do this for myself. What we are doing with the present T-L fits more into the curriculum...it meets more the needs of the students in my classroom.
Ruth	I could have covered the topic more quickly myself.

Sharon	I was innovative and liked to bring new things into the classroom.
Bob	I have the plan in place and to plan cooperatively takes extra effort and scheduling.
	It is too much work, basically, that is it.

The teacher-librarian identified the clarity of the innovation as a problem when cooperatively planned resource-based teaching was being implemented in the school. She explained the problem in this way. "In my first year in this school teachers did not understand what I was talking about. We had to sort of work out and through mistakes."

Factors - Staff development and support. A second factor which affected the implementation of resource-based teaching was the staff development (inservice) and support provided to the teachers. The responses of the teachers to staff development and support factors related to their implementation of cooperatively planned resource-based teaching techniques are shown in Table 4.6. Only one of the five teachers indicated that s/he had attended any type of inservice related to implementing resource-based learning techniques. The same teacher also mentioned speakers who had been in the school during professional half days.

Table 4.6 Factors

Staff Development (Inservice) and Support

Connie	I have not attended an inservice based on that in particular but I think they have touched on it in a round about way with the whole language program and have encouraged teachers to work with the teacher-librarian.
Liz	No, I have not really received any assistance or support. We haven't been forced to do it.
Ruth	I have gone to an inservice on resource-based learning at an Institute. Also, we have had speakers on professional half days.
Sharon	I have never attended an inservice on this.
Bob	I have never attended an inservice.

The teacher-librarian said that consultants from the Learning Resources Branch of the school system had come to the school for an inservice related to the Needs Assessment. The use of cooperatively planned resource-based learning had been one area included in the Needs Assessment. However, two of the three teachers who had been in the school since the implementation of resource-based teaching did not mention any within school inservice related to the innovation. These two teachers were the heaviest users of cooperatively planned resource-based teaching techniques of the five teachers interviewed.

School level factors. The implementation of resource-based learning techniques was also affected by the characteristics at the school level. These characteristics include the principal, teacher-teacher relations and teacher characteristics and orientations.

Table 4.7 indicates that all three school level factors had affected the teachers' usage of the innovation. Two of the three teachers who had been in the school for a number of years remarked on the role the principal played in implementing cooperatively planned resource-based learning in the school. According to the teacher-librarian, the former principal pushed teachers to use cooperatively planned resource-based teaching techniques. She explained that he was a believer in the "effective school" and had constant communication with her about which teachers were using the innovation and which were not using it. Sharon indicated that teacher-teacher relations were important to her when she revealed that she felt the personality of the teacher-librarian was an important factor in whether a teacher chose to work on cooperatively planned resource-based teaching with him/her.

Table 4.7

School Level Factors

Connie	You have a wealth of knowledge in the T-L in your school so use her.
	Depending on what your principal's expectations are determines how much more you will use it.
	A lot of encouragement from the principal.
Liz	No one has been insistent for us to work with the T-L.
	We come in more often. The students see the T-L as a teacher rather than someone who reads books.
Ruth	The principal! We were told to do it. He insisted on it. He was around asking "How are you using the T-L?" This was the former principal. We have a new principal this year and I believe the expectations are the same.
Sharon	It depends on the T-L and the teacher. If there is not a good rapport with your colleague, chances are that you are not going to be enthusiastic about doing that kind of a unit. Personality is a great factor.
Bob	Every T-L I know encourages it and wants it to happen...People just find it difficult to set up some more communication with other people.

The affect of the teacher's characteristics were apparent when Bob indicated that he felt that the personal cost of implementing the innovation was too great. The teacher-librarian was the only individual he mentioned who had ever encouraged him to use resource-based teaching methods.

Since the new principal in the school had not pressured teachers to use cooperatively planned

resource-based teaching, the teacher-librarian had found that fewer teachers were using it. However, in spite of a drop in usage, many teachers were still using the innovation without principal pressure.

Continuation. Table 4.8 indicates that four of the five teachers interviewed planned to continue to use resource-based learning techniques in the 1989-90 school term. Bob remained uncertain about whether he would use the technique.

Table 4.8

Continuation

Connie	Next year I plan to use resource-based teaching techniques as often as I can. I like to try something different every year. Hopefully, the T-L and I can work again and just try new things.
Liz	I would like to use basically the same units that I used with the T-L this year. I was on the E.D.F. writing committee with integrated learning. We produced a binder with three themes and that is the one I am doing on fairy tales. I would like to do the other two themes next year.
Ruth	I plan to do the same two units as I did this year. Maybe more in the way of literature.
Sharon	Next year I am teaching another grade level. I hope to work on social studies because it lends itself well.
Bob	I will use resource-based learning if the opportunity arises. It is something I will look to do because it is a good thing to do. Again, I'm not sure that I will have any easier time using next year than I did this year.

The teacher-librarian noted in her interview:

> Very definitely there has been a change in usage in the five years that I have been here. This year it is a more natural thing than in the past four. Maybe the times resource-based units had been planned or the number of teachers using resource-based methods had fallen down this year, but it is just happening so naturally. Yes, there has definitely been an improvement.

She felt that teachers would continue to use cooperatively planned resource-based teaching during the next school year.

The principal indicated a desire to work with the teacher-librarian in the coming year in order to be better informed about which teachers were using cooperatively planned resource-based learning techniques. However, at the time of the interview, she had not discussed this plan with the teacher-librarian.

School Summary

On the basis of interviews, observations and print materials the following summary statements have been formulated in regard to Lakewood School.

1. Four of the five teachers expressed positive feelings about using cooperatively planned resource-based teaching strategies pointing out the use of a variety of materials to meet student needs, process learning, and various grouping methods as some of their reasons for using it.

2. Although they were operating at different levels of use, cooperatively planned resource-based teaching strategies were included in the teaching repertoire of four out of the five teachers interviewed.

3. In addition to principal pressure to use the innovation reported by two teachers and the teacher-librarian, perceived need and the quality and the practicality of the innovation were positive factors which led to implementation. Teacher characteristics and the rapport between teacher and teacher-librarian surfaced as factors which could have a negative influence on the usage of the innovation.

4. While four teachers planned to either expand their usage or continue using it with the same units, one of the five teachers made no commitment to using cooperatively planned resource-based teaching methods next year.

PRAIRIE VIEW SCHOOL

Context

Prairie View School had an enrollment of 559 students and offered both a French Immersion and an English program from Kindergarten through Grade 8.

Both the present principal who had been in the school for the past five years and the previous principal were strong supporters of cooperatively planned resource-based learning. There were twenty-six teachers in the school. Ten of these were French Immersion teachers, eleven were English program teachers and five were support staff.

Over the past three years there had been several changes in teacher-librarians. Connie had been in the school for two years. Prior to her coming to the school, Jane Smith has been in the school from January to June after Sharon Adams assumed a position in the Learning Resource Branch in central office. Sharon had been in the school as teacher-librarian for five and a half years and had been instrumental, along with the principal, in establishing cooperatively planned resource-based learning in Prairie View School.

Since the school had originally been designed on a totally open area concept, the LRC was located in the centre of the school. Its rectangular shape was open with classrooms located on both ends. At the time of the visit, only one end was still open to a classroom. On the other end, the LRC had expanded into an area designed to house two classrooms. This area was used as a teaching area and for housing the reference and non-fiction collections. A small conference room, a

story room and a computer lab were located in an enclosed area on one side of the LRC. The enclosed areas on the other side were divided into audio-visual storage, library workroom, and teacher aid workroom.

The LRC had a fully automated card catalog and circulation system. Three computers were available for regular use by students to access the card catalog.

A full time teacher-librarian and a half time library technician staffed the LRC. Parent-volunteers were used to do circulation, to shelve books, and to do other jobs as required. Only five parent-volunteers were coming regularly at the time of the research, but fifteen had been helping on a regular basis earlier in the year.

Flexible scheduling was used for all areas in the LRC and there was a schedule book in which teachers could reserve a particular area for use for a certain period. The teacher also indicated on the schedule whether the teacher-librarian would be involved with the class during that period.

A busy, quiet buzz of activity predominated throughout each day in the LRC. There were classes working on projects, students borrowing books, and individuals working on activities. Rarely was there a moment when some student or class activity was not

occurring. At all times students exhibited good behavior as they used the LRC.

The teacher-librarian was involved with the vice-principal in a planning session on Friday afternoon. They had a regular planning and evaluation session booked at that time as they worked together on a social studies unit. The teacher-librarian also met with the Grade 4 teachers at recess to discuss a Newspaper Week workshop which she had attended. The teachers were planning to use the information from that workshop in their classrooms. In addition to planned meetings, the teacher-librarian also had short on-the-run meetings with teachers to schedule times for future planning sessions.

Throughout the week, the teacher-librarian worked with many classes on cooperatively planned resource-based learning unit. Some of these classes were held in the LRC and some in the classroom. One unit which was occurring in the LRC, the teacher-librarian explained had not been cooperatively planned. She had organized it herself, because she felt students in that class were missing out. She wanted to provide an enrichment experience for the students.

A Grade 5/6 French Immersion class came to the LRC several times throughout the week to work on a unit

which had not been cooperatively planned with the teacher-librarian. The students were researching provinces and pollution. The teacher pulled materials from the shelf and handed them to the students who were unable to locate information on their topic. There was no evidence that the students had been taught how to locate the materials which they would need and students complained of lack of materials. Students were copying directly from the text rather than taking notes on the information.

The teacher-librarian exhibited many characteristics of a successful teacher-librarian. She showed great willingness to help teachers who frequently stopped by to ask her for help. Her flexibility was obvious when she was prepared on several occasions to change her schedule to accommodate the teacher and students. The smoothly running LRC testified to the organization which was required to achieve this.

The principal was supportive of cooperatively planned resource-based learning. He and the teacher-librarian had regularly weekly meeting scheduled during which they discussed items related to the LRC. He also stopped to check on students and to talk to them about what they were doing as he walked through the LRC. The vice principal also showed

interest in what the students were doing in the LRC by sitting down with a group of students to discuss the project on which they were working.

Views of the Change Process

Only three teachers were available for interviews in Prairie View School. Another Grade 3 teacher declined to be involved because she was too busy with other activities related to her retirement. The Grade 5 teacher interviewed was not typical because she had been a teacher-librarian herself for many years. The teachers interviewed do not adequately reflect the usage of cooperatively planned resource-based learning techniques in Prairie View School as witnessed by the researcher during the visit in the school. Most teachers appeared to be actively involved in working on resource-based learning units with the teacher-librarian.

Meaning - beliefs. The teachers' beliefs about cooperatively planned resource-based learning are indicated in Table 4.9. Two of the three teachers interviewed were users of the innovation although Judy did not involve the teacher-librarian because of her own background as a teacher-librarian. Susan and Linda were concerned that the teacher-librarian did not have

enough time to work with teachers as much as they would like.

Table 4.9

Meaning - Beliefs

Susan	What this has done, it has opened up the opportunities that I feel that I can give to the kids. There is just not enough time for the T-L to deal with all the staff members as we would all like.
Judy	Resource-based learning doesn't standardize kids. I really believe that every child has to reach...they are all expected to do what is best for them. It's the only way to meet the needs of the individual students....
Linda	We don't have enough people...we need a librarian with a split personality.

The teacher-librarian expressed frustration about the lack of time to meet the expectations of the job. She said, "I've been doing a lot of thinking about the expectations for the job...so much has to be done to keep everything running." In addition, she did not feel it was necessary to work with each teacher on staff, but stated the following:

> I'm not going to plan a unit with a teacher just to say I did it. I don't do that. If that teacher is working fine, knows exactly what she is doing, I really honestly don't think she needs me...Some people choose not to cooperatively plan because there is no need for it, because they can do it on their own." She also asserted that "T-Ls must remember that when teachers plan with them, the teacher is risking him/herself.

The principal also believed that the time element became a problem for a teacher-librarian in a school which was committed to using cooperatively planned resource-based learning strategies. He pointed out the following:

> I can't think of a way you could destroy a T-L more quickly than through sheer overwork, just an overload. If suddenly the demands were to come from all sides and the T-L was conscientious and wanted to meet those demands, I'd hate to foresee the consequences of that. I think it would be burn out.

He felt that teachers who were new to Prairie View School generally adopted the philosophy of the school and became involved in using cooperatively planned resource-based learning. However, he stated that there were exceptions.

Meaning - materials. Table 4.10 shows that both Susan and Judy believed that the greater variety of resources students were able to use was an asset to the innovation while Linda expressed frustration over finding the resources she required. The teacher-librarian agreed with Susan and Judy when she said, "It is far better for the child to be learning about something using several sources of information rather than just one book. So much more interesting, more creative, and a better way to learn." However, she did indicate that finding enough materials at the right reading level could be a problem.

Table 4.10

Meaning - Materials

Susan	The main strength I find is the pooling of resources - human, A-V, and written. Sometimes I give certain students selected materials to work with in order to meet their individual needs. It has enhanced both the information and the resources that the kids are getting.
Judy	Any textbook is only going to hit one or two kid's interest. Why should a publisher in New York decide what I am going to teach to my particular kids?
Linda	We don't have enough books. We have a huge library here, but we don't have enough. We can never have enough. I don't know if there is a library that has enough. ...not being able to find a book when you want it, because someone else is using it.

Meaning - teaching practices. Susan indicated in Table 4.11 that using cooperatively planned resource-based learning added variety to the ways a group of children could be taught. The teacher-librarian stated that the teachers who worked with her did so because both she and the teacher enjoyed working together.

Table 4.11

Meaning - Teaching Practices

Susan	With two bodies it is easier to handle the group of children. You an do a couple of things. You can each alternate teaching the whole group or you can break the group into two and teach. Two people are definitely helpful. Kids appreciate different people.
Judy	
Linda	I haven't used the T-L so much to teach...but to help me so that I can teach.

Integration into repertoire. Based on the comments recorded in Table 4.12, teachers at Prairie View School were using resource-based teaching strategies through different levels on the taxonomy. Susan, who was working in partnership with the teacher-librarian, was using resource-based learning strategies through level 7. Judy, whose entire program used resource-based learning strategies, was not directly involving the teacher-librarian in her program because she, also, was a trained teacher-librarian. Although she was acting as her own teacher-librarian, she was operating through level 6 of the taxonomy. Linda, who viewed the teacher-librarian as a resource or an idea source on which she could draw when she

required help, was working through Level 4 of the taxonomy.

Table 4.12

Integration of Resource Based Learning Techniques

Susan	One of us comes up with an idea. If it is something I have decided that I want to do, I ask to get together with the T-L...I pull my resources and she pulls hers. We get together and pool our resources and book a time line well in advance for periods when she is free and I am able to fit in...from there we set up the unit.
Judy	I don't work directly in formal planning with the T-L because I was a T-L myself...But I always let her know what I am doing and we swap ideas in the staff room...
Linda	One of the units that I use now in English is formula fiction and I planned it with a former T-L...This year when it came time to do that unit, our T-L was doing Telemedia which pretty well booked up her time, so I did the unit without her. I view a T-L...as a resource I can use to find out how to do something for myself.

Susan has reached the refinement level on the Levels of Use scale. She not only planned in partnership with the teacher-librarian but was concerned with using the innovation to benefit her students. Judy was difficult to place on the Levels of Use scale because she did not fit the definition for cooperatively planned resource-based learning used in this study. However, she was using resource-based learning successfully with her students. Because Linda

had not reached the level of working in partnership with the teacher-librarian, she is at the non-use level.

The teacher-librarian stated that over the past year she had planned resource-based units cooperatively with all but three teachers on staff, "...all the others have, not lots or extensively, but have done some - at least one unit." She said that Linda had used cooperative planning the least and then a Grade 6 teacher with whom she had difficulty working. She also explained that when she came to the school, everyone was expecting to do cooperative planned resource-based units and they were continuing to plan resource-based units with her.

Factors - characteristics of cooperatively planned resource-based learning. In Table 4.13 Susan indicated that perceived need influenced her to adopt cooperatively planned resource-based learning strategies. Linda's complaint that the teacher-librarian was not available when she needed her suggests that she did not find the innovation practical. The various staff changes had affected Judy's usage of cooperative planning. Although she was still an advocate of resource-based teaching methods, she had decided to work by herself.

Table 4.13

Characteristics of Cooperatively Planned Resource-Based Learning

Susan	If I have an idea about something and I am not too sure about winging it, I will go to the T-L and we'll do it together for the first time around. That is something I can add to class work for the next number of years.
Judy	I was trained as a teacher not educated as a teacher in England and the process is very different...we did lots of what we called projects...So I have really never worked in any other way...The difference now is that I have this wonderful library right at my finger tips. When Sharon left and Jane came was the point that I said, "Heck with this nonsense. I'm going to do my own thing." I didn't' do it as much as I have done this year. This year it was a planned action. Before I'd ask the T-L something and she didn't know. It would be much quicker to just find out for myself. So by the time Connie came the following year, I had been doing this for six months so I didn't really bother to ask any more.
Linda	The T-L is not there when I need her.

The teacher-librarian indicated that most teachers came to her to plan units cooperatively when they needed help in setting up a research unit or in teaching note taking. In addition, the quality and practicality of the innovation influenced teachers to use it, because teachers soon realized that it was easier to do resource-based projects when there were two teachers instead of one to work with students.

The principal felt that teachers needed to see themselves as facilitators of information rather than providers of information before they were ready to use cooperatively planned resource-based teaching methods. He also suggested that the "changes in curriculum...because they are process oriented...by their very structure encourage the use of resource materials and draw the T-L into the planning process."

Factors - Staff development (inservice) and support. As shown in Table 4.14, both Susan and Linda mentioned staff development programs related to cooperatively planned resource-based learning which had been held in Prairie View School.

Table 4.14 Factors

Staff Development (Inservice) and Support

Susan	We had a half day on lifelong learning that tied into resource-based learning.
Judy	I wouldn't have gone to an out of school inservice because I know what to do. If it was a school one, they would likely ask me to help with it.
Linda	As part of staff meetings we've done some things along that line.

The teacher-librarian also indicated that the Needs Assessment had been done in the school as well as a couple of workshops on the Independent Learning

strand from the Common Essential Learnings (Sask Ed, August, 1988a). She stated that an excellent workshop on this topic had been held in the fall of the 1987-88 school term, and that each individual in each class did an independent learning project which was exhibited for Education Week.

School level factors. Table 4.15 indicates that teacher-teacher relations were important school level factors for both Susan and Judy. Susan stated that when cooperatively planned resource-based learning was introduced in the school, she began using it because she got along well with her teacher-librarian at that time. Although Judy did not work cooperatively with the teacher-librarian on resource-based teaching units, she felt that her relationship with the teacher-librarian was an important factor in her teaching.

Table 4.15

School Level Factors

Susan	It started a number of years ago when the school board or the school administration decided there should be more interaction between teachers and T-Ls...We had a super librarian and she and I got along really well...I started using her.
Judy	I'm a bit of a renegade. I like to just do my own thing which is really neat with our T-L. I support her in what she does and she supports me in what I am doing. We say, "that is a neat idea, can you give me a copy..."

I don't feel that it is the T-L's library.

Planning doesn't take me as long because of my experience and because I am a T-L, I know the resources. I know who to go to and if they haven't got it here, I know it will be at one of the other schools I was at. I know the other T-Ls.

Linda

According to the teacher-librarian, Sharon Adams, her predecessor had done so much ground work on cooperatively planned resource-based learning when she was in the school that all the teachers who were in the school at that time were quite aware of what it was. She indicated that she had to work harder getting teachers who were new to the school in the past two years to use cooperatively planned resource-based learning techniques.

The principal indicated a variety of ways he encouraged teachers to use cooperatively planned resource-based teaching techniques. He mentioned always including the teacher-librarian on the staff meeting agenda and giving her/him visibility on school wide projects, e.g. Education Week activities. He also mentioned the workshop on Independent Learning and resource-based learning. He contended that "if cooperative planning is going to work, the teachers must want to do it. My wanting to do it may influence

them to some extent but it doesn't give them ownership." He also felt that encouragement to the teachers provided by the teacher-librarian influenced the use of the innovation.

Continuation. As shown in Table 4.16, the three teachers interviewed do not plan any significant changes in their usage of cooperatively planned resource-based teaching in the coming term.

Table 4.16

Continuation

Susan	If Connie is here, we will continue to work together as we have in the past. If there is someone else, I hope they would be experienced in resource-based learning.
Judy	I plan to continue the same as this year.
Linda	When it is appropriate, I will work with the T-L.

The teacher-librarian indicated that she believed that the teachers who were presently using this teaching technique would continue to use it regardless of who was in the LRC. This opinion was confirmed by the principal who felt that teachers in Prairie View School would continue to teach using this innovation.

Although cooperatively planned resource-based teaching is firmly entrenched in Prairie View School, the principal suggested that it could not

be taken for granted that it would continue. He stated,

> I feel that there has to be some kind of policing that someone has to keep encouraging that this resource is available in much the same way that the sign on the highway reminds you about the speed limit. You may be going the speed limit but the sign is a reminder.

School Summary

The following summary statements have been compiled based upon the interviews, observations and print materials from Prairie View School.

1. Two of the three teachers interviewed felt that resource-based teaching provided more meaningful learning experiences for their students through exposure to a variety of resources and alternate teaching strategies.

2. Both Susan and Judy included cooperatively planned resource-based teaching in their teaching repertoire. However, Judy did not conform to the definition used in this study because she did not involve the teacher-librarian, because she was, also, a trained teacher-librarian.

3. In addition to perceived need and the quality and practicality of the innovation, positive relations between the teacher-librarian who originally implemented cooperatively planned resource-based teaching/learning and the teachers, as well as the

current teacher-librarian and the teachers, had positively influenced the teachers to use cooperatively planned resource-based teaching techniques. The change of the teacher-librarians in the school and the lack of accessibility to the teacher-librarian were factors which contributed negatively to the development of a teaching partnership between the teacher-librarian and teachers.

4. Although the three teachers interviewed had not planned any significant changes in their use of cooperatively planned resource-based teaching, both the teacher-librarian and the principal believed that use would continue because it had become central to the philosophy of Prairie View School.

HILLTOP SCHOOL

Context

Hilltop School had an enrollment of 452 students and a teaching staff of 18 classroom teachers and 3 support staff, a resource room teacher, a music teacher and a band teacher. Four of the 18 classroom teachers taught half time. A major change in administration had occurred in January when the vice principal assumed the role of principal and a classroom teacher was appointed acting vice principal.

This relatively new school was bright and attractive. The enclosed LRC was located in the centre of the school. Students' work was displayed throughout the facility and brightly decorated bulletin boards were visible above the book shelves which surrounded the room. In addition to the teacher-librarian, a half time technician and a few parent-volunteers keep the facility functioning.

The teacher-librarian was new to the school this year. When she met with the principal in the fall, she was told to move slowly because teachers were not accustomed to using the Learning Skills Continuum to cooperatively plan resource-based learning units with the teacher-librarian.

Although a sign in sheet was kept on the circulation counter, some classes still had scheduled library periods; however, according to the teacher-librarian, another class needing that period to work on a resource-based learning activity had precedence over the scheduled class. The teacher-librarian said that the teachers had never heard of flexible scheduling before she came to the school. They were also surprised that more than one class was allowed in the LRC at one time.

Throughout the week the teacher-librarian had been very busy working with classes. Many of these

activities were literature based and occurred in the classroom during regularly scheduled library periods. Because there was a split one/two class in the school, the teacher-librarian had taken responsibility for a weekly scheduled library period during which she presented a story and a follow up activity based on a farm theme. On another occasion during the week, she taught a lesson on the newspaper to a Grade 5 class while the teacher assisted her. The teacher-librarian complained of never having enough time to get everything done that she needed to do.

While the teacher-librarian was working in the classrooms or on administrative jobs, the LRC was very quiet with little or no activity occurring in it during most of the day. Neither the Grade 5 nor the Grade 6 teachers who brought their classes to the LRC to work on research based projects related to their curriculums had cooperatively planned the units with the teacher-librarian. The teacher-librarian asked the Grade 5 teacher what the students were researching and involved herself with helping the students locate appropriate materials for their assignment. Most of the students were copying their information directly from the encyclopedia.

When the Grade 6 class came to the LRC to do reports on a state in the United States, the

teacher-librarian expressed frustration about not being able to get the teacher to plan the units cooperatively. She had been handed the assignment the night before and had not had time to bring in materials from other sources; consequently, the students were limited to the encyclopedia. Another concern she expressed was that students were being given a grade for their jot notes but had not been taught how to do jot notes.

The teacher-librarian was anxious to establish cooperatively planned resource-based teaching in the school. She actively sought ways to become involved with LRC projects which were not cooperatively planned in the hope of persuading the teacher to cooperatively plan a resource-based learning activity with her. Flexibility was evident in her willingness to rearrange the LRC schedule to meet the teacher's needs. Activities in which she was involved were well organized.

The present principal was extremely supportive of cooperatively planned resource-based teaching strategies. In the fall, as vice principal, he had been the first teacher to cooperatively plan a unit with the teacher-librarian. In addition to modeling the proper use of the LRC, he had included the expectation, that every teacher would cooperatively

plan at least one resource-based learning project with the teacher-librarian, in the school goals for next year. However, since a completely new administrative team would be in the school, he would not be there to carry through on the goals.

Views of the Change Process

The interviews accurately reflect the activities which occurred in the LRC as witnessed by the researcher.

Meaning-beliefs. The beliefs which the teachers of Hilltop School held about cooperatively planned resource-based teaching are presented in Table 4.17. Three teachers expressed varying concerns about the time required to use this teaching method. However, Marilyn believed that time should not be an issue. Joan believed that covering the curriculum might be difficult if she attempted cooperatively planned resource-based teaching. She exhibited lack of clarity about the innovation because she did not understand that this teaching method could be incorporated into her curriculum and that it was not something extra to do.

Table 4.18

Meaning - materials

Joan	I can't envision bringing 25 kids down and finding enough materials on that topic.
Pat	
Ellen	The students can get so much more information by using the LRC.
Marilyn	What I try to do is instead of teaching to the middle is I find materials that are high and materials that are low and we work there in terms of designing the unit.
Fred	When the materials are compiled for the unit, there are a variety of reading levels and different vocabulary levels. There is enough variety there to satisfy all the needs.

The teacher-librarian expressed frustration with the lack of good new materials with which to support the new social studies curriculums. She said, "How can we do all this resource-based learning if we don't have the resources?...There have to be funds or something available for us to get it; otherwise, we can't do it."

Meaning-teaching practices. As indicated in Table 4.19, the teaching practices required for cooperatively planned resource-based teaching held different meanings for teachers in Hilltop School. The principal suggested that he believed that "most or all teacher-librarians would not only teach but teach with a motive which is to use the resources in the LRC."

teacher-librarian indicated that teachers have had to change their teaching styles to incorporate different resources.

Table 4.19

Meaning - teaching practices

Joan	I like to do one where all the kids are doing the same topic because I feel that I have so much more control...I usually do that in the classroom with the T-L finding materials and some ideas about what we might try...The ideal thing is to come into the LRC the second time.
Pat	Sometimes I am interested in doing resource-based learning. It feels right for me but at other times I would choose to go a more independent route.
Ellen	I feel that, rather than just teaching students things, letting them do the learning is better than standing up and teaching the little limited information that an individual may have.
Marilyn	There could be a problem if you had really different teaching styles, but we have been lucky because the T-L and I have been heading in the same direction.
Fred	It is easier because the whole process is not on your shoulders...It is more of a team effort with everybody contributing to the end result rather than it being the responsibility of one person.

Integration into repertoire. Cooperatively planned resource-based learning occurs at Level 6 of the Taxonomy of Resource-Based Learning. As presented in Table 4.20 only three teachers interviewed in Hilltop School were actually using the innovation. Pat, Marilyn and Fred all indicated that, for at least

one unit a year, they had worked in partnership with the teacher-librarian in planning a resource-based teaching unit or project. Since Ellen consulted the teacher-librarian about when materials were available and where she could find materials, she was operating through Level 4 of the taxonomy. When Joan gathered materials for her animal unit she was working through Level 3 and through Level 4 when she asked the teacher-librarian for ideas and to gather materials for a unit.

Table 4.20

Integration of resource-based Learning Techniques

Joan	If we are reading about animals, I'll pull out a stack of animal stories so the kids don't have to trott off to the library. I find that many Grade 3s don't select very wisely. The T-L always has a library period on the go with us...This is done during our regularly scheduled library period. We come in twice a week to meet with her. In our social studies unit on settlers and pioneers, the T-L helped an awful lot rounding things up and giving me ideas.
Pat	We sit down and discuss what we want to accomplish in a particular unit. The T-L has suggestions. I have suggestions. We decide on a course of action. She gets all the materials together. We go from there. We start interacting with the kids and we are on the way.
Ellen	When I plan a unit I usually get together with the T-L if she is available...to point me in the direction of materials which will help me teach in the classroom. If there is a report to do or an assignment ...of a

more independent and lengthy nature, I solicit her help as well in coming to the library for research periods...I would like her help in the library very much but she is very busy and can't always accommodate everyone.

When I do start a new unit about two or three weeks before I begin, I consult with her to see if materials will be available...if some other teacher has the materials out, I will postpone the unit until the materials are available. I also ask her to dig out materials for me of all kinds from kits, filmstrips, and books. That is about the only way I use her. Pardon me, I'll add one more thing - booktalks.

Gee! I didn't know working with teachers on cooperatively planned resource-based teaching was part of the T-Ls job at all.

Marilyn — We work together in preparing a unit in two ways. The first way we make an appointment and sit down to go through our objectives and what we want to teach. The second way...tends to be a little less formal in terms of sitting down.

Fred — There isn't much more other than giving the T-L forewarning so that she can do some searching around to see if there is enough available material for the project. We talk about it prior to doing it. She may give me some advice or point out things that might enhance what I am doing.

These teachers were also operating at different levels of use. Marilyn had reached the routine level when she sat down with the teacher-librarian to plan a unit. However, she also stated that informal planning seemed to be taking place more frequently and that "the teacher-librarian and I have a pretty good intuitive sense of what each other does and so it works fairly well." When this type of planning occurs, Marilyn no

longer is using cooperatively planned resource-based learning as defined.

Both Pat and Fred were using cooperatively planned resource-based learning at the routine level. They both indicated that they cooperatively planned one or more units a year with the teacher-librarian. Joan expressed interest in using the innovation for the first time next year. She said, "I guess this would be the time now to let the teacher-librarian know that I would really be interested to see what would come of it." Since she is considering using the innovation, she is operating at the orientation level. However, Ellen's lack of knowledge about cooperatively planned resource-based teaching places her at the non-use level.

The teacher-librarian stated that she had seen a change in the numbers of teachers using cooperatively planned resource-based teaching, but that some teachers were a little slower getting involved. According to the teacher-librarian, there had not been "a lot of cooperatively planned resource-based teaching in the school before this year at all." During the school year, she indicated that twelve out of seventeen teachers had planned at least one unit with her.

Factors - characteristics of cooperatively planned resource-based learning. As illustrated in Table 4.21

clarity about cooperatively planned resource-based teaching/learning was a problem for some teaching at Hilltop School. Both Joan and Ellen seemed to lack clarity about cooperatively planned resource-based teaching. Joan could not imagine how it could work, and Ellen did not feel that the teacher-librarian needed to be involved. Marilyn and Fred asserted that using cooperatively planned resource-based teaching methods was nothing new which suggested that they both may have held a false clarity about the innovation.

For Joan the complexity of using cooperatively planned resource-based teaching was also a concern. The extent of the change required in her teaching methods to allow her students to work on a curriculum related project in the LRC, although it was planned and taught by herself and the teacher-librarian, was difficult for Joan to accept.

Table 4.21

Characteristics of Cooperatively Planned resource-based Teaching

Joan	To come here and throw everybody loose for that half hour, I guess that I'm not very imaginative but I just don't know how we would make it work.
Pat	Resource-based teaching is just like everything else; they just put a new name on it. I don't think it is much different from the way I taught before.

Ellen — I feel quite independent as a teacher...following the curriculum in my own classroom with my own students. I don't feel that the T-L has to take on that great deal of the responsibility for it.

Marilyn — Like a lot of things we do in education, I don't think this is really new for a lot of people.

Resource-based teaching forces you to look pretty carefully at the objectives of a unit and from the objectives to the evaluation. Whereas otherwise, I think that teachers tend to start a project, get involved and go along in a rather haphazard fashion. I mean great things happen but I think that this forces us to take a closer look at, for instance, the scope and sequence chart and to do a little more concrete planning.

Fred — I have been doing it for a long, long time.

The teacher-librarian felt that the success rate of teachers who had tried it had influenced other teachers to use it. She suggested that because the successful teachers "sort of talked it up" other teachers had come to realize that cooperatively planned resource-based teaching worked.

Factors - Staff development (inservice) and support. Table 4.22 indicates that only Marilyn could recall attending an inservice related to cooperatively planned resource-based teaching. Joan insisted that if she had had support in implementing cooperatively planned resource-based teaching, she would have become involved in using it.

Table 4.22 Factors

Staff Development (Inservice) and Support

Joan	If I had received inservice similar to what we had for problem solving and someone checking to see if I was doing it, I might have become more involved in cooperatively planned resource-based teaching.
Pat	I have never attended an inservice on cooperatively planned resource-based teaching.
Ellen	I have never attended an inservice on this.
Marilyn	I have attended two inservice on cooperative planning, resource-based learning. One of the more recent was part of a vice principals' meeting with their T-Ls and that was good. A senior administrator addressed the issue with all of us in terms of administration and working with the T-L...He stressed how important it was that this kind of thing be trumpeted by the administration to try to make provisions that was happening with all members of the staff. The other one that I attended was in connection with a C.E.C. workshop.
Fred	If I have attended an inservice, I can't remember it.

The teacher-librarian referred to the same inservice session that Marilyn had attended. The teacher-librarian stated that a senior administrator had said that cooperatively planned resource-based teaching was an expectation which would be written into the school board's plans for next year.

The principal's response to whether there had been any inservices on cooperatively planned resource-based teaching was "There have been no inservices as far as I

know...that is a good idea though...that would best be followed by a directive from the principal."

School level factors. Different principals had had different affects on cooperatively planned resource-based teaching in Hilltop School. In the fall the teacher-librarian had met with the principal who had counselled her to move slowly with implementing cooperatively planned resource-based teaching using the Learning Skills Continuum because the teachers were not used to working in that way. However, the acting principal at the time of the interview, indicated that he felt that both the teacher-librarian and the principal influenced teachers to use cooperatively planned resource-based teaching. The teacher-librarian described her present principal in this way, "I have an administrator who was really keen on cooperatively planned resource-based teaching. He has been checking with me during our meetings. He asks how many teachers are left who have not worked with me."

However, as Table 4.23 shows only Ellen remembered that the principal had suggested that a teacher should work cooperatively with the teacher-librarian. In spite of that comment, from a conversation which the teacher-librarian revealed had taken place after Ellen's interview had been conducted, Ellen did not realize that working cooperatively with the

teacher-librarian was an expectation. Following the interview, Ellen shared the following statement with the teacher-librarian.

> I didn't realize that this was an expectation that people had for us to do this. One thing that I liked about teaching was that I could go into my room and shut my door where I could be the king in my castle and I didn't have to involve anybody else at all.

Relations between the teacher and the teacher-librarian were factors identified by Marilyn and Fred. Marilyn did not feel that having a new teacher-librarian had affected her usage in any way while Fred indicated that he had had to learn how the new teacher-librarian did things before he could work with her effectively.

The characteristics of the teachers were also revealed as a factor which affected usage of cooperatively planned resource-based teaching. Both Joan and Pat indicated that their independent nature had influenced their usage of the innovation.

Table 4.23

School Level Factors

Joan	I know that I am a fiercely independent person. I just take care of me and the kids around me and know what the heck we are doing and leave it at that...I have never seen my way clear to plan enough to leap off that diving board.

Pat — The T-L is always encouraging us to be involved. I suppose that part of it is personal style and part of it is that I worked at a school where the T-L was somewhat different. Therefore, I kind of got out of the habit of using the LRC. I have tended to just go a lot of it on my own.

There are some people who thrive on group work and planning together. I don't happen to be one of those kind of people. I like it once in a while because I think it can provide a different dimension to your classroom. I tend to be more of an independent kind of worker.

Ellen — This year we have a new T-L and she had a new directive which is different from the one that we had last year. Last year classes would go once a week to the LRC for a book exchange plus any other time that we needed. This year it was discouraged. We were told that this came from the university or from where T-Ls learn that only students who need to go to use the library should be going - not the whole class. So it has been a little different this year.

The administration said that we should go to the T-L and plan together.

Marilyn — Different personalities always bring different perspectives to the job. I would say that having a new T-L hasn't particularly affected my usage.

Personality could also be a problem.

Fred — It is just a matter of getting to know how the T-L does things. As the year went along the T-L and I learned more about each other and we have been utilizing each other a lot better.

The principal felt that the characteristics of the individual teacher were a primary influence on whether s/he used cooperatively planned resource-based teaching methods. He expressed the following:

> I think it is the individual and how comfortable they feel about their competencies...the teacher

> who will first use a teacher-librarian to work with is a teacher who feels comfortable about their own teaching...If you don't have the confidence that what you are doing is good, it is very difficult to have another professional come in.

The teacher-librarian concurred with the principal when she stated, "I think that some people are threatened by the teacher-librarian...They don't see that it can be very unthreatening and that it can be very supportive. Some of them just aren't ready for this."

- Continuation. As indicated in Table 4.24, Joan was considering trying cooperatively planned resource-based teaching next year. Both Pat and Ellen contended that their usage would remain the same while Fred hoped to use it more now that he was more familiar with the curriculums. Since Marilyn would be in another school as administrator next year, she planned to model cooperatively planned resource-based teaching in that school.

Table 4.24

Continuation

Joan	The T-L and I do work well together. I really should try resource-based teaching. I guess this would be the time now to let her know that I would really be interested to see what would come of it.
Pat	Quite frankly, I always have the best intentions but when I get down to the actual planning, and looking at the way I operate, probably it will be similar to what it was this year.

Ellen	I guess the same as this year. I try to squeeze in with our T-L whenever I can but as I say with 30 on staff it is difficult.
Marilyn	I will be part of an administrative team which hopefully encourages that sort of thing from square one. I guess by modeling that kind of behavior it will give a fairly strong message to the staff that this is really important.
Fred	Next year I should be more familiar with the courses...I found out this year what things work better than other things...The more I learn about the courses the better I can plan a unit which the T-L can help me with.

The teacher-librarian predicted that cooperatively planned resource-based teaching would be used more in the coming year. She stated that several teachers had already told her that they were looking forward to working with her next year and that they were glad to have the opportunity to work with her in that way.

The principal also felt optimistic about the use of the innovation in the coming year. He believed its usage would continue to grow no matter who the teacher-librarian in the school was but that it certainly would as long as the central office administration left the present teacher-librarian in the school. He indicated that he would talk to the principal who would be in the school next year and encourage him "to push it as well."

School Summary

Using the interviews, observations and print materials obtained during the research, the following statements summarize the findings at Hilltop School.

1. Although four of the five teachers believed that students benefitted from using a variety of materials, concerns about the time required and a lack of understanding about the innovation had resulted in limited implementation of the innovation.

2. While two teachers had not yet implemented cooperatively planned resource-based teaching methods, three had used it for at least one unit during the past year. However, these teachers were not using this teaching method at the same level of use.

3. Lack of clarity and false clarity about the innovation, as well as the complexity of the change, had had a negative influence on the teachers' implementation of cooperatively planned resource-based teaching/learning strategies.

4. Two of the four teachers who would be in the school next year were considering either attempting usage for the first time or expanding their usage of cooperatively planned resource-based teaching while the other two teachers were not considering a change in their use of the innovation.

RIVERBEND SCHOOL

Context

Riverbend School had an enrollment of 588 students and a staff of thirty-one teachers. The principal who was retiring at the end of the school year had been in the school for two years.

The Learning Resource Centre was a large spacious facility in which three classes could easily be accommodated. It was located in the centre of the original school. The L.R.C., as well as the entire school, was built on the open-area concept. There were four entrances, none of which could be closed off. The walls did not reach the ceiling and the LRC was surrounded by the hallway. Consequently, noise from the hallways sometimes proved disruptive to those working in the LRC. One of the teacher's interviewed stated that the LRC was sometimes quite chaotic and that not more than a few people were allowed to use it at one time.

A raised reading loft served as a story and reading area. The four poles in the centre of the facility were decorated like trees which created an inviting atmosphere. The LRC had a computerized card catalog system which students used with ease. A full time teacher-librarian and a half time library

technician staffed the LRC with volunteer help provided by parents from the area.

All classes were scheduled into the LRC for weekly library periods. These periods were used for borrowing books and reading periods. The kindergarten had a weekly story and follow up activity carried out by the teacher and the teacher-librarian. There was no schedule book which indicated the scheduled periods and provided teachers with an opportunity to sign in to use the LRC other than during their scheduled periods. One of the teachers interviewed described the schedule like this:

> At the beginning of the year the teacher signs up for their library period and that is it. Sometimes I come and say I really need to get in here is there any time? I may do that on the spur of the moment. It might be a good ideal to have it sort of rotating because the same time every week doesn't always work out.

The visit to Riverbend School occurred the fourth week in May and the LRC was very quiet throughout the week. Few students came to use the LRC on their own and only a Kindergarten class worked with the teacher-librarian on a cooperatively planned activity. After the teacher-librarian had read the story in the LRC, she worked on a follow up activity with the class in the art room.

The teacher-librarian indicated that most units had been completed the previous week and that no new ones had been started because of the retirement tea for the principal. No planning sessions occurred during the week. The teacher-librarian shelved books, helped with circulation problems, carded books, changed newspapers and put periodicals away in addition to other administrative jobs. One teacher expressed frustration over the amount of time the T-L spent doing overdue notices.

A group of ten students came to the LRC to use the tables to work on centre cards. The centre card activities did not require the use of any resources from the LRC. Since the teacher-librarian was working with the kindergarten students in the art room and the classroom teacher did not check on them, the students were unsupervised and spent most of their time talking, changing tables and fooling around.

On another occasion a Grade 3 teacher had students working independently on animal reports. These reports were not cooperatively planned with the teacher-librarian. Students relied on the encyclopedia and materials which the teacher helped them locate. Since the students were copying straight from their resource materials, there was no evidence that they had been taught note taking skills.

Although the teacher-librarian spent time each day shelving books, she pulled books for teachers for units in their classroom and shared new materials with teachers who might find them useful. She also expressed frustration over the number of books which teachers had in their classrooms for whole language units. When teachers had 200 books in their classroom, she said that there were not enough books left in the LRC for others to use.

The teacher-librarian did not have regularly weekly meetings with the principal where she could discuss problems such as the number of books taken to a classroom by one teacher. The principal was not visible in the LRC throughout the week; however, this may have been because he knew that the staff were preparing for his retirement tea.

Views of the Change Process

Five teachers were interviewed in Riverbend School. Carol was extremely reticent about the interview and was not prepared to discuss the topics in any depth. A second Grade 8 teacher who was scheduled for an interview was feeling too tired after the retirement tea. Both Edie and Carol had been in the school for eight years and were to be on leave from the school for the first half of the 1989-90 term. Monica

and Louise were new to the school this year. Tom was transferring to a different school for the 1989-90 term. The interviews with these teacher were representative of the activities observed by the researcher while in the school.

Meaning - beliefs. Table 4.25 shows that four of the five teachers interviewed maintained that for them time limited their use of cooperatively planned resource-based teaching. Both Monica and Louise implied that the teacher-librarian and the teacher must be compatible if they are going to form a teaching partnership.

Table 4.25

Meaning - Beliefs

Edie	I hardly have time to sit down with myself to plan let alone planning with someone else.
Carol	I would have to reconstruct quite a large part of my program which requires time. I would have to do that during July and August which are supposed to be holidays.
	The T-L is very busy. I don't think she has time for every class in the school. This is a very large school.
Monica	The trick is finding the time...If I want to involve the T-L, it takes more of my time.
	The weakness is setting up similar kinds of goals - working together with another person.
	I really believe that I should be in here all the time and that my children should be in here all the time.

Louise — I sometimes don't think that all T-Ls have the same philosophy.

Sometimes I would send my kids to the LRC and there are books exchanges going on and a big hubbub going on. I thought "How can we really work in this space?" I don't know if it is the way our particular LRC is organized. Maybe we could have a quieter area where it could be separated from the borrowing area, but that is a physical problem.

Tom — A weakness with resource-based learning is the time element and the preparation. The ability just to physically sit down together and get it organized.

The teacher-librarian confirmed the teachers opinion that finding time to work cooperatively was a problem. However, the principal stated that it did not make sense not to use cooperatively planned resource-based teaching, but that to use it meant more time was required for planning which meant more effort on the teacher's part. He pointed out, "Some professionals, unfortunately, are not prepared to put out the extra time and effort it takes to sit down and plan, to arrange a meeting, and simply to make the program more adaptable and more interesting for the kids."

Meaning - materials. Together Monica and Louise had done one cooperatively planned resource-based learning unit with the teacher-librarian during the past year, and they felt that the number and variety of

books added to their students' learning experience. Since neither Edie nor Carol had used resource-based teaching methods, the use of materials for this type of learning activity did not have any meaning for them. They were simply concerned with the difficulties they had in obtaining materials for their classroom programs. The teachers' responses are shown in Table 4.26.

Table 4.26

Meaning - Materials

Edie	A T-L might have a better knowledge base as to what might be available for a specific grade level and reading ability and that kind of thing. If this was a wide open school...it might eliminate the overlap in the materials...I think that needs a bit of adjustment in scheduling because sometimes there just aren't materials available at all.
Carol	If you want to do a literature based program and need 30 copies of a book, it is very frustrating because rarely will you find 30 copies of the book that you are looking for. Finding materials and materials at the right reading levels is a problem. A lot of them are too hard for primary level and yet the topic would be interesting if only the students could find material they could read. Copyright laws are a problem. The topics I like to do are sometimes obscure and I can't find the topic in the LRC. I have been here eight years so I pretty well know what is in here.
Monica	Many texts.

Louise	We brought resources in and we had about three or four resources for each explorer...Some of those were better than others we discovered. We got hold of a few extra books that were maybe a little easier.
Tom	

Meaning - teaching practices. Table 4.27 indicates that the three teachers who have used cooperatively planned resource-based teaching units appreciate how students can work independently at learning. Louise noted that this was different from when she stood in front of the class and presented the information. For Edie, the teaching practices for the innovation had no meaning because she had not used it, and she believed that the teacher-librarian should be teaching her class without any input from the classroom teacher.

Table 4.27

Meaning - Teaching Practices

Edie	I really feel strongly that the term T-L is loosely based, because I think there should be more teaching going on. I'm not always sure that that has to be a direction from this teacher. I would like to see it more of a two way street.
Carol	
Monica	Two teachers are better than one simply because the kids have access...many people's ideas if the kids can tap into them. We want the kids to have a goal of lifelong learning; well, you're setting that up.

If you have definite ideas of how you want something done you have to be ready to accept other people's ideas and other people's standards.

Louise — I love to be in a situation where I'm not the focus, where I can give over the responsibility to the children and let them go for it. I like to see that kind of drive in them to learn and to find information and to somehow paraphrase it or write it down so they show that they understand it.

There were lots of people to help. That is what the children commented on as well in the evaluation. They really enjoyed having lots of adults to help them if they had trouble.

Tom — When I do cooperatively planned units, it is more student orientated than teacher orientated. There is a lot of time that the students have - unstructured time that they are expected to do work. That can be very successful and it also has its down side. Some students aren't at the level yet to be able to do that sort of thing. That is a bit of concern that I have with resource-based learning in our system all across the curriculum.

The teacher-librarian indicated that some teachers were still relying on the textbook method of teaching; however, she pointed out that Grade 7 social studies had been taught very differently during the past year. She attributed this to the new vice principal who had come into the school this year and taught the social studies in Grade 7. He had been willing to use cooperatively planned resource-based learning units and together they have created several learning packages for his students.

Integration into repertoire. As shown in Table 4.28, the teachers interviewed were working through two different levels on the Taxonomy of Resource-Based Teaching. Both Edie and Carol who only used the LRC to supply books for their classroom programs were working through Level 3. The other three teachers had all cooperatively planned one resource-based learning unit in partnership with the teacher-librarian which indicated that they were working through Level 6 of the taxonomy.

Table 4.28

Integration of Resource-Based Learning Techniques

Edie	I say to the T-L, "I will be doing this unit. Could you find the materials for me?"
Carol	I take books out on a theme and take them to the classroom for the students to look at.
Monica	I have only done one unit. Oh, no, we had the T-L introduce some books - mystery, at one point. I don't think that the T-L and I really work together. I've planned one unit with her this year.
Louise	I've used the T-L a couple time for finding books. This year we've done one unit...It was actually already developed by one of the teachers and the T-L helped improve it... The T-L was available on some occasions to help the children in their small groups.
Tom	The T-L and I have just finished a unit of work for a language arts group in which we basically sat down and set out what we were going to do. I wanted to teach the students how to write a report so that when they

get to high school, they have some really good skills...The students came down and we laid out the goal and I handed out a hand out...the T-L was able to help them with some of the resource materials in the LRC

I think the T-L and I have done one unit this year.

The levels of use for the innovation were similar to their levels on the Taxonomy. Edie and Carol who showed no understanding of how to use cooperatively planned resource-based learning units were at the non-use level. Monica, Louise and Tom had all reached the mechanical use stage for the unit which they had each planned with the teacher-librarian during the past year. They were implementing cooperatively planned resource-based teaching step by step and were prepared to plan a second unit with the teacher-librarian in the coming year.

The teacher-librarian indicated that she had seen a change in the number of teachers planning resource-based learning units with her. She stated that she grabbed them when they were new to the school and suggested that they plan a unit together. When teachers had come from other schools where they had worked with the teacher-librarian, she found that those teachers were more likely to be prepared to use cooperatively planned resource-based teaching methods.

Of the thirty-one teachers on staff, she reported working with ten on cooperatively planned resource-based learning units.

The principal confirmed that several new teachers to the staff were using cooperatively planned resource-based teaching techniques. He alleged that it was difficult to get some people away from the concept of using the teacher-librarian and the LRC for just a spare.

Factors - characteristics of cooperatively planned resource-based learning. Table 4.29 indicates that three teachers were concerned with the quality and practicality of using the innovation. Carol explained that scheduling and planning were just not practical for her while Edie suggested that in her experience she got more done by herself. Louise felt that to be able to use cooperatively planned resource-based learning, the teacher-librarian must be willing to accept her way of doing things.

Both Monica and Tom indicated that they had used cooperatively planned resource-based units this year because of a perceived need. Monica felt that her students needed the experience of working on a project in the LRC while Tom was not quite sure how to plan his unit until he worked cooperatively with the teacher-librarian.

Table 4.29 Factors

Characteristics of Cooperatively Planned Resource-based Learning

Edie	I have gone to the T-L and asked her to plan a unit a few times in the past. I guess that I just found that I was getting farther by myself.
Carol	I guess it just takes more time to sit down with the T-L. In our school she would be sitting down with 35 people. However that could be scheduled, I guess it would be good.
Monica	I really believe that T-Ls are not used as they should be used. I thought that this was a good unit to use. I just felt that my class hadn't been in...
Louise	I think it also has to suit what I want to do rather than someone saying this is what I do. I have to say well this is my style or this is what I would like you to do. It can't be this is only what the T-l is going to do. When a T-L says s/he will help with a unit, s/he should make him/herself available throughout the unit - not start out and then disappear later in the unit to shelve books or to do technical things like they are more important than the unit.
Tom	When I came to the T-L and asked for help, I basically had tunnel vision. I didn't quite know how I was going to get these kids to pick a particular topic.

The teacher-librarian believed that teachers were often influenced to try cooperatively planned resource-based learning after observing other teachers who have completed a successful unit. She also suggested that others never attempted to use it because of lack of clarity..."Some don't use it because its

unfamiliar territory. They don't really know what is involved."

The principal felt that the new social studies programs in Grade 7 and 8 were going to require the use of more cooperatively planned resource-based teaching techniques. He explained the situation this way:

> I think it forces everybody to look at the subject and say "What can I do with it to make a program that will really benefit children?"...The teacher will look at that subject area, look at the long term objectives, break it down into manageable pieces and utilize someone like the teacher-librarian. It is good to bounce ideas off someone else who is not in the classroom.

Factors - Staff development (Inservice) and support. As shown in Table 4.30, neither Edie nor Carol remembered ever having attended an inservice on cooperatively planned resource-based learning. The other three teachers indicated that they had all attended inservice programs on the innovation at different times and in different places.

Table 4.30 Factors

Staff Development (Inservice) and Support

Edie	No inservice or support.
Carol	No inservice or support.
Monica	I go to those kinds of inservices because I am interested in them and I probably pick up one or two ideas whenever I go.

Louise	I have only been here one year so I haven't attended one here but I have had many inservices where T-Ls have talked about what they would like to do and the different things that they do. I feel that that was all the kind of inservice I need.
Tom	I have gone to two inservices in which we had the T-L there who actually talked about resource-based learning. It was through the social studies curriculum but that was two or three years ago.

The teacher-librarian mentioned the inservice session which had been held for the vice principal and his/her teacher-librarian at central office as well as an inservice on the new Grade 7 social studies curriculum. She felt that it had been very successful, because "it really got him going."

According to the principal, last year at the beginning of the year, a professional half day had been devoted to cooperatively planned resource-based learning. He stated that some teachers were still a problem because they "see the LRC in a different light than the school board policy enunciates." Having the consultants out to discuss the issue had been considered, but he was not certain that the teachers really wanted that to happen.

School level factors. As indicated in Table 4.31, teacher-teacher relationships were frequently mentioned by teachers for using or not using cooperatively planned resource-based learning strategies. The

teachers interviewed frequently mentioned that the personality of the teacher-librarian and how s/he worked with others was crucial to developing a working partnership. Monica also mentioned that her own characteristics could present a problem when planning a unit with the teacher-librarian, because she had her own ideas about how she wanted things done.

Table 4.31

School Level Factors

Edie	Cooperatively planned resource-based learning has never been made available to me. I see it working with the kindergarten quite well. It doesn't seem that it carries over much more than that.
Carol	
Monica	The trick to cooperatively plan is making sure that you have the same ideas and that you can work together. It is unrealistic for a T-L to think that she can work with all teachers...I think that they have to make sure that they do have the same kinds of ideas. The problem I have had is maybe I have too many definite ideas of my own about the way I want to do it and it is hard to include someone just to include the resources.
Louise	The T-L invited us to work with her...the person I'm sharing an open space with had developed this unit as a T-L with another teacher. She was anxious to try it again. If you don't work well together or have different ideas, it is going to be hard to get anything done. I see teaching style and personality as being crucial. I have been through lots of T-Ls and I have noticed a great deal of difference ...the whole idea of working

with someone is wonderful but if I have to first of all teach them what I want, I find it a lot easier to do it myself.

Because I have been through quite a few T-Ls and there are so many different personalities, I have found it a lot better just to sit back and not put that many demands on the LRC at first until I figure out...how flexible the T-L is, how s/he works with kids and how s/he work with teachers.

Tom — I would think maybe personality could be a problem where somebody might have a certain idea about how something should be done and the other person isn't exactly comfortable with that particular way of doing it.

The teacher-librarian explained that the teachers who mainly were not working cooperatively on resource-based teaching units were the ones who had been in the school for a long time. She claimed, "No matter what comes out from Central Office or the CELs, they just aren't doing it. I hear lots of complaining and 'oh no, this is just another thing that we have to do'."

She also asserted that the administration had made no effort to push people into using cooperatively planned resource-based teaching methods. This seemed to be confirmed when the principal indicated that the main support for the innovation came from the teacher-librarian.

Continuation. Since both Edie and Carol will be out of the school for half of the year in the coming

school year, neither of them were prepared to consider implementing cooperatively planned resource-based learning techniques. However, both Louise and Monica worked with the teacher-librarian on one unit during the past year, and expressed interest in continuing to work with her on further units next year. Tom who was transferring to another school was planning to work with his teacher-librarian on resource-based units in social studies next year.

Table 4.32

Continuation

Edie	I imagine that I will continue much as I am. Next year is going to be my last year in this school so I'm sure that I am not going to change...I don't imagine that I am going to shake any boats next year.
Carol	I am not sure what I will do next year since I understand that I will have a split grade and I will be out of the country for half of the year.
Monica	I actually would like to ask the T-L just to sit down and see how much she would like to do and in what kinds of areas she would like to be involved. I think that resource-based learning could fit into just any place in my curriculum
Louise	I would like to try working with the T-L on another unit.
Tom	I will be using the T-L a lot more than what I have been using her here right now because of the social studies I'll be teaching next year.

Since the teacher-librarian had begun to work with some of the new teachers during the past year, she felt

that this would continue in the next school term. She suggested that not only would they repeat the units which she had worked with them on this year, but would probably create another one. She reported that some of the teachers had already talked to her about putting together another unit in the next year.

School Summary

The following summary statements about Riverbend School have been developed from the data obtained from interviews, observations and print materials in that school.

1. Four of the five teachers interviewed expressed concern about the time required to do cooperatively planned resource-based teaching; however, the three teachers who had employed this teaching strategy expressed positive feelings about the materials and teaching practices.

2. Only three of the five teachers interviewed had incorporated cooperatively planned resource-based teaching strategies into their teaching repertoire for the year and each of them had used this techniques for only one unit during the school year.

3. Perceived need had influenced two of the teachers to plan units with the teacher-librarian,

while teacher-teacher relations motivated a third to become involved. The quality and the practicality of the innovation as well as teacher characteristics and the personality and style of the teacher-librarian emerged as factors which could create barriers to implementation.

4. Only two of the four teachers remaining in the school had plans to use cooperatively planned resource-based teaching strategies in the next year; however, the teacher-librarian felt that some of the new teachers on staff would also wish to continue using it.

SUMMARY OF TEACHER VIEWS OF THE CHANGE PROCESS

A comparison of the schools studied and their relation to the elements of the change process are presented in the following charts. In addition, a discussion of the most influential positive and negative responses to cooperatively planned resource-based learning strategies as expressed by the teachers interviewed is presented.

As summary Table 4.33 illustrates, the subjective meaning held by the teachers varied within each school and among the four schools studied. A greater portion of teachers in Lakewood and Prairie View than in Hilltop and Riverbend believed in resource-based

learning. In three of the four schools more teachers had changed their teaching methods to resource-based learning than had changed their beliefs.

Summary Table 4.33 - Subjective Meaning

	Lakewood (N=5)	Prairie View (N=3)	Hilltop (N=5)	Riverbend (N=5)
Beliefs-Supporters	3	2	2	1
Materials-Positive	3	2	3	2
Methods-usage	4	1	3	3

Summary Table 4.34 shows the integration of resource-based teaching strategies in each school. The levels of use for the teachers interviewed ranged from non-use to refined use. However, Lakewood School had the most teachers working at a higher levels of use and Riverbend had the most teachers working at the lower levels of use.

Summary Table 4.34 - Integration

	Lakewood (N=5)	Prairie V. (N=3)	Hilltop (N=5)	Riverbend (N=5)
Refined	1	1		
Routine	3		3	
Mechanical				3
Orientation			1	
Non-use	1	1	1	2

Factors which influenced teachers to use resource-based teaching strategies and their concerns about it are indicated in Summary Table 4.35. Only Lakewood reported both need for the innovation and its quality and practicality as factors which influenced their use of cooperatively planned resource-based learning. Both Prairie View and Riverbend were influenced by perceived need while Hilltop indicated that neither of these factors had affected their use of the innovation.

Participation in staff and system inservice sessions was reported by some of the teachers in each school. In none of the schools studied had all the teachers attended an inservice session on the innovation.

Miles (1983) concluded that administrative commitment, support and pressure were essential to

successful implementation of an innovation. Both Lakewood and Prairie View identified principal pressure and support as factors which had influenced their use of cooperatively planned resource-based learning strategies while neither Hilltop or Riverbend teachers discerned this commitment in their principals.

The Stages of Concern delineated by Hall and Loucks (1977) indicated that teachers concerns progress from concern about self to concern with how the innovation will affect their students. Three teachers in both Hilltop and Riverbend indicated concern about the working rapport between themselves and the teacher-librarian when using cooperatively planned resource-based learning techniques, while only one teacher in Lakewood held this concern. Teachers in three schools identified the quality and the practicality of using the innovation as a concern, which suggests that these teachers' concerns are moving from concerns about self to concerns about the teaching task and how cooperatively planned resource-based learning can be used effectively.

Summary Table 4.35 - Factors

	Lakewood (N=5)	Prairie V. (N=3)	Hilltop (N=5)	Riverbend (N=5)
A. Facilitative				
-R.B.L.				
Need	3	1		2
Quality	2			
-Support/				
Inservice	2	2	1	3
-School				
Principal	2	1		0
T-L		2	2	0
Teacher char			2	0
B. Concerns				
-Rapport	1	0	3	3
-Quality &				
Practical	2	1		3
-Curriculum	0		1	

As indicated in Table 4.36, in all four schools teachers who were already using cooperatively planned resource-based teaching strategies expected to continue to use them in the coming year. One teacher who had been a non-user was interested in attempting cooperatively planned resource-based learning in the new school term, while one teacher who had used resource-based learning for one unit felt that cooperatively planned resource-based learning fit into all her curriculum and planned to discuss with the teacher-librarian how involved she would like to be. Two teachers felt that they would be using cooperatively planned resource-based learning in the

new school year because both would again be teaching social studies.

Table 4.36 - Continuation

Lakewood (N=5)	Prairie V. (N=3)	Hilltop (N=5)	Riverbend (N=5)
4	2	3	3

Positive Influences

Benefits to the students was the most frequent positive influence mentioned by the teachers. Twelve teachers mentioned the ways that students benefitted when cooperatively planned resource-based methods were used. They felt that the wide variety of materials which students could use made it possible to meet the varying learning needs of their students.

A second significant influence, although mentioned only by 3 of the 18 teachers interviewed, was the principal's expectations for the staff to implement cooperatively planned resource-based teaching. Teachers in Lakewood School and Prairie View, both with a high level of implementation, mentioned this factor while Riverbend School, which showed a lower degree of implementation of the innovation, did not cite the principal's expectations as a significant influence.

Negative Influences

Time required for planning and rapport with the teacher-librarian were the two negative influences most frequently mentioned by the interviewees. Eight teachers expressed concerns about the amount of time required to cooperatively plan resource-based learning units, while eight teachers asserted that their relationship with the teacher-librarian influenced whether or not they worked cooperatively with her/him.

The purpose of this study was to examine from the teachers' perspective how the teachers' experiences with cooperatively planned resource-based teaching had influenced their use of this strategy. The findings in this chapter indicate that the subjective meaning teachers held about resource-based teaching strategies and diverse factors of the change process had influenced the degree of integration of this innovation into their teaching repertoire and their plans for continued use. Benefit to their students and principal pressure related to this teaching strategy had influenced the teachers positively, while the greatest negative influences for using this teaching strategy were the time required for planning and the teacher's rapport with the teacher-librarian. These findings will be discussed further in the following chapter.

CHAPTER FIVE

SUMMARY AND DISCUSSION

A summary of the study and a discussion of the findings are presented in this chapter. In the final section suggestions for further research on this topic are made.

Summary

The background of this study and the purposes for it as well as the methodology used and the findings are reviewed in the following section.

Background. The school system involved in this research had been in the process of implementing cooperatively planned resource-based learning in all schools in the system since November, 1982. Commitment to cooperatively-planned resource-based learning/teaching had been reiterated on many occasions by a senior administrator for the system. Further commitment to the use of this teaching strategy was exemplified in a booklet published by the system for the 1989-90 school term. However, seven years later, at the time of this study, this teaching strategy had not been fully implemented by all teachers in the system.

The operational definition was that resource-based learning/teaching is a unit of study which is cooperatively planned by the teacher and the teacher-librarian and involved students in a meaningful use of a wide variety of print, non-print and human resources (Ontario Ministry of Education, 1982; SAEMS, 1986 and Saskatchewan Education, 1988).

Purposes. This study investigated from the teachers' perspective how their experiences with cooperatively planned resource-based learning had influenced their use of this teaching method. The subjective meanings about the innovation held by the teachers, the degree of integration of this method into their teaching repertoire, the factors affecting implementation and the teachers' plans for continued use of the innovation were the questions which guided this study.

Methodology. Emphasis was placed upon the teachers' experiences with cooperatively planned resource-based learning. In order to examine the teachers' experiences with the innovation, it was necessary to be on site to see the total context of the school and to talk directly to the teachers. Semi-structured interviews were used to understand the teachers' experiences with the innovation, while information about the context of each school where the

teacher was expected to implement the innovation was obtained through participant observation.

Findings. Although all schools in the study were of similar size, had been in operation for ten years or more, were staffed by a full-time teacher-librarian, and had an L.R.C. well-stocked with materials, implementation of cooperatively planned resource-based learning/teaching strategies by teachers varied among the schools. The findings for each of the guiding questions for the study will be discussed in the following section.

Question 1: What subjective meanings about cooperatively planned resource-based learning did the teachers hold in terms of required changes in beliefs, materials and teaching strategies?

Cooperatively planned resource-based learning is a complex change requiring changes in beliefs, materials and teaching methods. In three of the four schools, more teachers had begun to use cooperatively planned resource-based learning strategies than had changed their beliefs about it. The subjective meaning held by the teachers varied within each school and among the four schools studied. Teachers using this teaching method believed that their students benefitted from its use. Connie's comment "Kids are really missing out if this isn't used," exemplifies this belief. Teachers

who were not using this teaching strategy believed that a shortage of time was one of the barriers to their usage of it.

The teachers interviewed believed that the variety of materials to which students were exposed when they were involved in a resource-based learning unit was superior to the one text method of teaching. They felt that by using a variety of materials the individual learning needs of the students could be more adequately met.

Working with another teacher and the child-centredness of the teaching strategy were the positive aspects of cooperatively planned resource-based learning mentioned by some of the teachers interviewed. While other teachers stated that the difficulties of working with another person who might not share their expectations and teaching style inhibited them from implementing this teaching strategy.

In summary, eight out of eighteen teachers had changed their beliefs about cooperatively planned resource-based learning. These teachers believed that their use of this teaching strategy benefitted their students. Ten teachers out of eighteen considered the materials used in cooperatively planned resource-based learning superior to the textbook approach because a

variety of learning levels could be accommodated while students were studying the same topic. Eleven of the eighteen teachers interviewed had included this teaching strategy in their repertoire because of its child centredness and the opportunity to share planning, teaching and evaluating with another teacher. Fullan (1982) found that changes in teaching methods precede changes in beliefs and these findings have been confirmed in this study.

Question 2: To what degree have resource-based learning techniques been integrated into their teaching repertoire?

Although teachers can be expected to work at all levels of Taxonomy of Resource-Based Learning in the course of a year, a teacher must be working at least at Level 6 to be doing cooperatively planned resource-based learning/teaching as intended. As the teachers' levels of use of the innovation varied, so did the level of the resource-based learning taxonomy which each teacher had attained. Summary Chart 5.1 illustrates the diverse levels at which teachers were using cooperatively planned resource-based teaching strategies. Since teachers should be working at level 6 of the Taxonomy of Resource-Based Teaching to be using resource-based learning strategies as expected and only twelve out of eighteen reported doing so, many

teachers still require leadership and support in implementing this teaching strategy.

The summary chart also reveals the difference in usage of this teaching strategy from school to school.

Summary Chart-5.1-Taxonomy of Resource-Based Teaching

	Lakewood (N=5)	Prairie V. (N=3)	Hilltop (N=5)	Riverbend (N=5)
Level 7	2	1		
Level 6	2	1	3	3
Level 5	1			
Level 4		1	2	
Level 3				2

Question 3: How did various factors affect the implementation of resource-based learning strategies?

The characteristics of resource-based teaching strategies, of staff development and support, and of each school guided the inquiry into this question. Six teachers indicated that perceived need to use this teaching strategy and the quality and practicality of it influenced them to integrate it into their teaching repertoire. Liz explained the characteristics of the innovation which influenced her to implement it in this way, "What we are doing with the present T-L fits more into the curriculum...it meets more the needs of the students in my classroom."

However, other teachers viewed the quality and practicality of the innovation as a negative. Edie summed this view up in this way, "I have gone to the T-L and asked her to plan a unit a few times in the past. I guess that I just found that I was getting farther by myself." False clarity about cooperatively planned resource-based teaching was a problem in Hilltop School, with four of the five teachers in the school stating that resource-based teaching was a new name for what they had always been doing.

The characteristics of staff development and support were split, with eight of the teachers indicating that they had attended at least one professional development session which presented information about using cooperatively planned resource-based teaching methods. However, ten teachers could not remember attending any such professional development session presenting information on this topic.

Three characteristics at the school level surfaced during the interviews. The most frequently mentioned school level characteristic was the effect that the teacher-librarian's personality and rapport with the staff had on the teacher's use of cooperatively planned resource-based teaching. The principal's expectations that the teachers would use this teaching strategy was

another school level characteristic cited by the teachers for implementing this teaching strategy. A characteristic which negatively influenced the teachers' use of the innovation was the independent nature of the teachers themselves.

Question 4: What are the teachers' plans for continuing to use resource-based learning techniques in the 1989-90 school term?

Eleven of the eighteen teachers interviewed planned to continue to use cooperatively planned resource-based teaching strategies in the 1989-90 school term. However, many of these teachers planned to continue to use it at the same level at which they had been working during the past year.

In summary, after seven years, fewer than two thirds of the teachers interviewed had implemented cooperatively planned resource-based learning/teaching strategies as intended. Concerns such as the teacher's working relationship with the teacher-librarian, the amount of time and effort required for cooperatively planning the units, and covering the curriculum surfaced throughout the interviews. Continued use and extended use of the innovation were threatened in two of the schools by the loss of principals who were key advocates of the innovation.

Discussion.

The discussion of the findings centres around the subjective meaning of the change, integration of the innovation into the teaching repertoire, factors influencing implementation and the teachers' plans for continued use of cooperatively planned resource-based teaching strategies.

Meaning. The subjective meaning of change and its relation to the change process, as explained by Fullan (1982), suggested that implementing cooperatively planned resource-based teaching strategies would have different meanings for the individual teachers involved. The findings of this study are consistent with the literature. The different subjective meanings held by Susan and Joan illustrate how teachers' views of the same innovation can vary. While Susan felt using resource-based teaching techniques increased the opportunities which she gave her students, Joan worried that the students would not learn anything if she employed resource-based teaching techniques.

Integration. The integration of resource-based teaching strategies into the teachers' repertoires varied as was expected. Also, the number of teachers who were using the innovation at the higher levels of use and at the higher levels on the taxonomy for

resource-based teaching varied among the schools. The variance in level of usage from school to school indicated that the context of the situation influenced the implementation of cooperatively planned resource-based teaching. Lakewood School had the largest number of teachers working at the higher levels of use and at higher levels on the taxonomy. Since several teachers and the teacher-librarian remarked on the former principal's expectations that teachers use this teaching strategy, it is apparent the principal influenced the situation in this school.

Factors. In this study, external and system factors were common for all schools. Both provincial and system policies strongly supported resource-based learning. All schools had attractive, well-stocked Learning Resource Centres with full time teacher-librarians and half time technical support.

The variation was found in the teachers' perceptions of the innovation itself, its meaning and demands, and of school level factors particularly administrative support, teacher interaction, and benefits to students. This study confirmed Fullan's (1982) findings that the teachers' perceptions of the innovation influence its successful implementation. While six teachers indicated that they viewed the need and the quality and practicality of resource-based

learning strategies as positive, others viewed it negatively. Cooperatively planned resource-based learning had been successfully implemented by the teachers who viewed it positively, while teachers with negative feelings about the innovation had had more difficulty using it.

Waugh and Punch (1987) found that teachers will consider whether the benefits of the innovation are worth the time required to implement it. Teachers in this study frequently mentioned time constraints as a factors which influenced their use of cooperatively planned resource-based learning techniques.

Strong and continuous pressure exerted by the principal were factors which Huberman (1983) related to the successful implementation of an innovation. Teachers at Lakewood school reported principal pressure as a major factor in their implementation of this innovation, while teachers at Hilltop and Riverbend did not indicate that the principal had encouraged use of the innovation.

Fullan (1985) reported that teacher interaction was significant in bringing about change in a school. The teachers involved in this study frequently reported their relationship with the teacher-librarian in the school as a significant influence in their use of

cooperatively planned resource-based learning techniques.

Teachers also cited the benefit to their students as a factor which influenced them to implement and continue to use cooperatively planned resource-based learning strategies. These findings support Fullan's (1982) research that teachers are concerned with how the innovation will meet the needs of their students.

Continuation. Although an innovation may be successfully implemented in a school, it must be protected from threats, which may arise, to its continuation. Loucks & Zacchei (1983) and Miles (1983) emphasized that the loss of a key advocate for an innovation can inflict a mortal blow to an innovation. Two schools in this study had lost or would lose a principal in the 1989-90 who had been a key advocate of cooperatively planned resource-based teaching strategies. Lakewood School had a new principal at the time of the interviews. The teacher-librarian indicated that the present principal had not shown much interest in the LRC and that there had been a notable decline in the numbers of teachers using resource-based units during the past year.

Hilltop School had a new principal in January who had promoted the use of cooperatively planned resource-based teaching strategies. However, although

he had written continued implementation of this innovation into the goals for the 1989-90 school term, he would no longer be in the school to see that the goal was promoted. His leaving the school posed a threat to the continued implementation of the innovation.

A change in teacher-librarians in a school can also pose a threat to the innovation as explained by Judy. She said that a change in the teacher-librarian had influenced her to choose to "do her own thing thing."

Other Considerations. In order for teachers to use cooperatively planned resource-based learning effectively, they must understand not only its characteristics, but how to use it effectively with their students. Lack of understanding about the innovation makes its implementation difficult. In addition, teachers must be willing to abandon their traditional, classroom autonomy to form a working partnership with the teacher-librarian in the LRC. Since, according to Brown (1988), this is a complex change, the principal as well as the entire staff must be involved in it implementation. The teacher-librarian cannot be the sole change agent if teachers are to implement this teaching strategy.

Implications.

Findings from this study suggest that school systems which wish to achieve implementation of a innovation such as cooperatively planned resource-based learning should:

1. Provide leadership at all levels in terms of expectations, professional development, and monetary support.
2. Expect principals to support the system innovations in their schools by providing strong leadership, voicing and demonstrating commitment, exerting strong and continuous pressure on teachers, monitoring teachers implementation, supplying continuing help and opportunities for interaction within the school, and developing a trusting atmosphere where teachers feel free to communicate openly about their successes and concerns about the innovation.
3. Encourage teachers to implement the innovation and share their ideas and successes with other teachers in the school.
4. Address concerns about lack of time for planning, working rapport with the teacher-librarian and

covering the curriculum.

5. Guard against threats to the innovation such as lose of a key advocate and introduction of new staff members who have not been properly oriented to it.

Further Research.

The following are suggestions for further research on this topic:

1. An examination of central office commitment to the implementation in practice and how that is carried through into the schools.
2. More naturalistic studies regarding meaning and interaction of factors over time.

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APPENDIX A

INTERVIEW SCHEDULES

Teacher Interview Schedule

Section A:

1. How do you use the Learning Resource Centre in your school?

If the answer is that the teacher uses resource-based learning techniques, ask the following questions:

2. Describe how you work with your teacher-librarian.

3. How often do you plan units using resource-based learning techniques?

4. How many resource-based learning units have you this year?

5. In what subject areas do you use resource-based learning techniques?

6. Do you ever use resource-based learning for an entire unit of instruction? Explain.

7. Are these units designed to meet the needs of students with differeing learning needs? If so, how?

If the answer to question one is that the teacher doesn't use resource-based learning strategies, ask the following questions:

2. How do you use your teacher-librarian?

3. Do you ever take library materials to your classroom and have students use them there? If so, why?

4. For Grade Seven and Eight teachers only. How do teach the new social studies and the health and lifestyles curricula?

Section B:

Ask teachers who use resource-based learning the following questions:

1. What influenced you to start working cooperatively with your teacher-librarian in planning and teaching resource-based learning units?

2. How is using resource-based learning different from the way you taught before?

3. Have you ever attended an inservice about resource-based learning?

4. What previous experiences have you had with implementing innovations from Central Office?

5. a. How has having a new teacher-librarian affected your usage of resource-based learning? (Used where appropriate.)

   b. Have you ever taught in another school? Did you use resouce-based learning there? Explain why or why not.

Ask teachers who do not use resource-based learning strategies the following questions:

1. Why are you not using resource-based learning?

2. Have you ever attended an inservice session on resource-based learning strategies?

3. Have you ever had anyone encourage you to use resource-based learning? Who was it? Why didn't you respond?

4. What previous experiences have you had with implementing innovations from Central Office?

Section C:

1. What do you see as the strength of using resource-based learning techniques?

2. What do you see as the weakness of using resource-based learning techniques?

3. What kinds of problems have you had with using resource-based learning or what problems are you afraid you will have if you used it?

Section D:

What are the teacher's plans for continuting to use resource-based learning strategies in the 1989-90 term?

Principal Interview Schedule

Section A:

1. How often do you see teachers in the L.R.C. with their classes?

2. How regularly do you see a teacher and the teacher-librarian having planning sessions for resource-based learning units?

3. Which teachers seem to be the heaviest users of resource-based learning strategies?

4. In which subject areas are these tachers using resource-based learning?

5. Do you see teachers taking library materials to their classrooms to do resource-based learning units? Why do you think they aren't working with the teacher-librarian on these units?

Section B:

1. a. What do you think influences some teachers to start working cooperatively with the teacher-librarian in planning and teaching resource-based learning units?

   b. What do you think inhibits others from using resource-based learning?

2. What have you done to encourage teachers to use resource-based larning strategies?

3. Have there been any inservice sessions on resource-based learning held in the school? If so, what?

   a) Who was the facilitator?
   b) Did you notice any significant changes resulting from this inservice? If so, what were they?
   c) What assistance have teachers received in using resource-based learning strategies?

4. What other innovations mandated by Central Office have teachers in your school implemented? What were the results?

5. How has having a new teacher-librarian in your school affected resource-based learning?

   OR

   Have any new teachers used resource-based learning for the first time in your school? Why do you think this has happened?

Section C:

1. What do you see as the strengths of resource-based learning?

2. What do you see as its weaknesses?

3. What kinds of problems have teachers had in using resource-based learning techniques?

Section D:

What do you think will happen with resource-based learning in this school next year?

Teacher-Librarian Interview Schedule

Section A:

1. How many teachers plan resource-based learning units with you? At what grade levels?

2. Have you seen a change in the number of teachers using resource-based learning techniques this year? Explain.

3. How often do teachers use resource-based learning and in which subject areas?

4. How are these units designed to meet the different learning needs of the students?

5. In what other ways besides resource-based learning are you directly involved with teachers?

6. How do grade seven and eight teachers teach the new social studies and health-lifestyles curricula in your school?

Section B:

1. What do you think has influenced teachers to start working cooperatively with you in planning resource-based learning units?

2. Why do you think some choose not to use resource-based learning?

3. In what ways have teachers had to change their teaching methods to incorporate resource-based learning techniques?

4. Have there been any inservice sessions on resource-based learning held for the teachers? If so, what?

   a) Who was the facilitator?
   b) Did you notice any significant changes in usage resulting from this inservice session? If so, what were they?
   c) What assistance and support have teachers received in implmenting resoure-based learning?

Section C:

1. What do you see as the strenths of resource-based learning?

2. What do you see as its weaknesses?