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ABSTRACT

This final report of a reading instruction study examined teachers' use of research-based practices when teaching reading comprehension, as well as the barriers that prevent teachers from using such practices. Six schools in two school districts in a southwestern urban area were selected for intensive study; 39 teachers of grades 4-6 participated. The report also developed and tested a school-based staff development process designed to change teachers' practices in reading comprehension instruction. Chapters of the study are titled: (1) "Introduction and Rationale"; (2) "Research Methodology and Site"; (3) "Research-Based Teaching of Reading Practices"; (4) "Teachers' Reading Comprehension Instructional Practices"; (5) "Teacher Beliefs and the School Context: Factors Affecting Teachers' Use of Research-Based Practices"; (6) "The Staff Development Process and its Effects"; (7) "Implications of the Staff Development Program for Student Learning"; and (8) Conclusions." The report concludes that research should provide practitioners not just with findings in the form of activities or behaviors that "work," but ways of thinking and empirical premises related to teaching and learning. The report also concludes that opportunities should be created to allow teachers to interact and maintain conversations around standards, theory, and classroom activity. Sixteen pages of references are attached; extensive figures and tables of data are included. The appendixes include a six-page list of syntheses and reviews of comprehension teaching practices; an outline of reading comprehension practices researched in the literature; evaluation instruments, survey instruments, and interview questions; and detailed case studies of five schools where research was conducted.

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ED 324 655

F I N A L R E P O R T

OF THE

READING INSTRUCTION STUDY

PART I: THE STUDY

**OERI, U.S. Department of Education
Grant # GO08710014**

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PREFACE

This study of the instruction of reading comprehension would not have been possible without support from the following three sources:

The Office of Educational Improvement, U.S. Department of Education provided the major three-year grant. A project the size of this study could not have been coordinated and conducted without external research funds. But more importantly, we felt that we had the strong cooperation and support of Eleanor Chiogiogi, then Acting Division Director, and the project monitor, Clara Lawson Copeland.

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Most importantly, our elementary school teacher colleagues with whom we conducted our research spent many hours over the course of this three-year effort talking with us, responding to questionnaires, and facing disruptions in their classrooms. Without their help, and that of the principals and students, this research could not have been conducted.

The work of many faculty members and graduate students--now faculty members in other institutions--is represented in this report. Rather than name them all, here, we have included a list of books, papers and chapters on the following pages that emanated from this project. In addition, we would like to mention the names of two wonderful secretaries/administrative assistants who worked so thoughtfully, conscientiously, and enthusiastically on this project: Barbara Snults and Marie Erickson.

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FINAL REPORT

READING INSTRUCTION STUDY

Virginia Richardson
Patricia Anders
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CHAPTER 1

INTRODUCTION AND RATIONALE

I. BACKGROUND

Over the last ten years, a substantial body of research on the teaching and learning of reading has been completed and disseminated. This research was primarily funded by the federal government through large-scale and coherent programs of research. An example of such funding is the OERI-funded Center for the Study of Reading (CSR) at the University of Illinois. Instructional research has been an important component of CSR's activity and is a high priority of the OERI (see the RFP for the Reading Research and Education Center, April, 1986). Despite this emphasis on reading research, test scores in reading, particularly in the upper elementary grades, are not rising as expected (The Reading Report Card, 1985). Further, naturalistic studies indicate that many teachers are not teaching comprehension (e.g., Bozskik, 1981; Coyne, 1981; Day, 1984; Durkin, 1978-79; Neilson, Rennie & Connell, 1982; Mason & Osburn, 1982).

During this same period of time, significant gains have been made in implementation of research on teaching, learning, and schooling. However, a major problem appears to be teachers' resistance to using research. The coherent research agenda in reading and the interest in teachers' use of research to affect teaching practices and student achievement form a strong link. By combining these two areas of investigation, the study described herein was designed to inform both the instructional research community and teacher educators designing preservice and inservice programs.

Thus, the purpose of this research program was to examine the knowledge base available to teachers, the processes involved in transforming that knowledge to and within the school context, and the implications of that process for transforming teacher education.

Current research in reading comprehension has its roots in schema theory. This theory suggests that knowledge is structured in large, complex, abstract units of organized information called schemata (Rumelhart, 1981). Learners understand text by determining how the ideas they read relate to their existing

schemata or knowledge. This description implies that comprehension is a constructive process by which readers interpret text according to their own understandings, or sometimes misunderstandings (Spiro, 1980).

The theory has important practical implications. Readers must have appropriate prior knowledge of the concepts presented in the text, sufficiently developed knowledge structures to meet the concept demands of the text, and the ability to access prior knowledge (Rumelhart, 1980). A related variable that affects comprehension is the accuracy of the reader's prior knowledge, since misconceptions impact comprehension (Anderson & Smith, 1983).

Schema theory also has important instructional implications. Good teachers probably acknowledge the importance of prior knowledge; however, the questions teachers need answers to are: What does one do when students apparently have little or no prior knowledge? How does one activate students' prior knowledge? How does one manage the variables of differing qualities and quantities of prior knowledge in the typical classroom setting?

These questions are best addressed by instructional research. The quantity of research conducted in classrooms with ecological validity considerations operating as a primary constraint has been a high research priority among teacher educators/instructional researchers. Our own research (Anders, Bos & Filip, 1984; Irwin & Mitchell, 1986; King & Bradley, 1986; Lloyd, 1985) is indicative of the movement across the country toward instructional research.

This exciting and important work is available to teachers in scholarly journals, and can also be found in magazines and other publications that are intended to speak directly to practitioners, such as Educational Leadership, Theory Into Practice, Becoming a Nation of Readers (Anderson, et al. 1985), and What Works (1986). Further, instructional research has become an integral component of many preservice teacher education programs, and some inservice programs. It is also addressed at teacher conferences. Why, then, do teachers consistently state that they do not use research in their teaching? (See, for example, Berger, 1976 and Waxman, et al., 1986.) And why do they apparently not adopt research-based reading practices in their classrooms when they hear about them? (See, for example, Florio-Ruane & Dohanich, 1984 and Vacca & Gove, 1982.)

One reason may be the way researchers have asked the questions of teachers. Teachers, in fact, do not use research--they use practices that may or may not be research-based. These practices come from a variety of sources that may or may not identify their research base. For example, most elementary teachers in the United States know the term 'time-on-task', and the majority of

them have received training on the notion. However, we would predict that few know anything about the research that identified and investigated the concept. (See a description of this work in Fisher & Berliner, 1985).

A second reason teachers may report not using research is that the research support for many practices simply has not reached a large enough critical mass to affect the typical teacher. Thus, the teacher may not be aware of research that supports the practices being employed.

Third, the majority of teachers in our elementary classrooms have been there for a number of years. In 1983, teachers with ten or more years experience comprised two-thirds of the public school teaching force (Plisko & Stern, 1985). The reading courses they took as preservice students did not incorporate the theory and research of the last ten years. As Tabachnick and Zeichner (1984) have pointed out, teachers acquire fundamental perspectives and understandings in their preservice programs and hold onto them during their years of teaching. Tips for practice, scattered inservice programs, and the rare suggestion from a supervisor may not be able to change strongly held beliefs about practice that would result in experienced teachers changing their practices.

Finally, the adoption of research-based practice involves a process of transforming that particular practice to the school/classroom context. We doubt that practices are adopted wholesale; rather, practices are molded, adapted and adjusted to fit teachers' perceived reality. Thus, in addition to reported and observable practices, teachers' rationales and theories behind practice need investigation. The language and arguments provided by teachers could be indicators of the quality of their practices.

The questions of interest in this research project included the following:

- o What are the research-based teaching of reading comprehension practices?
- o To what degree are teachers using research-based teaching of reading comprehension practices?
- o What are the barriers to the use of research-based practices?
- o Can a school-based staff development model affect teachers' use of research-based instruction of reading comprehension?
- o Does the use of research-based teaching of reading practices affect student reading achievement in a positive direction?

The program of research described in this report addressed these questions. This report consists of the following sections: A short review of the literature that guided the study; a description of the research site and methodology; five chapters that respond to the questions listed in the previous paragraph; and a summary chapter that discusses the issue of teacher change.

II. LITERATURE REVIEW

Reading

Kamil (1984) described reading research as being shaped by three groups of professionals: the experimentalists, the practitioners, and the translators who "speculate on the implication of experimental research and theory for instruction" (p. 46). At first blush, the lines of demarcation among these three roles would appear quite clear. However, as indicated previously, the process of "translating" research to the classroom is not as simple as one might expect. Further, those who have adopted the role of translator are finding rich territory for investigation. The purpose of this section is to exemplify reading research one would expect to be translated.

The process orientation of reading research during the past several years has moved both basic and applied researchers into the context of instruction--classrooms. Reading researchers' initial steps into classrooms were taken to investigate strategies evolving from particular theoretical orientations. That is, a strategy being tested could be linked to a particular theoretical stance (i.e., schema theory or psycholinguistic theory). This instructional research has resulted in research-based practices that should improve achievement if they were implemented into classrooms. Becoming a Nation of Readers (Anderson, et al., 1985) summarizes many of those practices. Included among the many recommended practices, the following examples of reading research-supported findings suggest the rich information and knowledge base available to teachers:

- 1) the quality and quantity of readers' prior knowledge can be predicted, and instructional lessons can be designed to accommodate that prior knowledge (e.g., Anderson & Smith, 1983; Langer, 1982);
- 2) strategies can be designed to activate prior knowledge, organize prior and forthcoming knowledge, and set purposes for reading comprehension and learning of concepts in content area classrooms (Anders, Bos & Wilde, 1986; Pearson & Gallagher, 1983);
- 3) comprehension instruction does work--students can comprehend whether it is by direct instruction (Rosenshine & Stevens, 1984), explicit instruction (Pearson & Gallagher, In Press), reciprocal teaching

- (Palincsar, 1984), or whole language (Goodman, 1986; Goodman, Watson & Burke, 1987); and
- 4) the structure, coherence, unity and appropriateness of text influences the quality of reader comprehension (Anderson & Armbruster, 1984; Beck, 1984; Meyer, 1985).

This knowledge base bodes well for the improvement of reading comprehension and high level thinking skills of intermediate and upper elementary grade students. As reported in Becoming a Nation of Readers (Anderson, et al., 1985), if the research we presently know were used in every classroom across the country, reading comprehension would be improved.

Teachers, Research and Change

The Context: Lortie (1975) described the ethos of school faculties as consisting of three aspects: conservatism, presentism, and individualism. This, he felt, is due in large part to the anxiety surrounding the uncertainty about classroom outcomes, and the lack of an agreed-upon professional knowledge. The conservatism norm implies that teachers may not accept new organization objectives because they rely on personal values and past experience. The presentism norm is indicated by the fact that teachers do not plan for long continuous periods, nor do they feel assured about their future performance.

The individualism norm implies little reliance on others for sources of knowledge, skills, or experience except during the first two years (Fuchs, 1969). Trial and error and individual personalities are the bases for developing good practice. Since students, circumstances and personalities of teachers differ, there is a tolerance for widely different practice as well as strong egalitarian norms. Differences in practice are therefore viewed as "matters of philosophy" judged by considerations of more scientific evaluative procedures (Metz, 1978).

While the concept of the improvement of practice is accepted, it is accepted within a framework of individual teacher experimentation and judgment. Lortie (1975) suggested that the "built-in resistance to change" may be due to the belief that "their work environment has never permitted them to show what they really can do" (p. 235).

One can think of Lortie's description as the culture of the teaching profession (Feiman-Nemser & Floden, 1986). Within this culture, the individual teacher's beliefs differ on such issues as the effectiveness and appropriateness of different classroom activities, the purposes of instruction, and the ways in which students learn. These beliefs can strongly affect the curriculum and activities chosen by teachers, as well as the manner with which they impart content and interact with students.

It is within this context that research-based reading instructional practices must be adopted or adapted by individual teachers. New practices are accepted, rejected or modified in a highly individualistic, context-specific manner. The principles inherent in the practices that are adopted conform to the beliefs held by the teachers, or the beliefs must be modified.

While this analysis may provide reasons for teachers not readily adopting some research-based teaching of reading practices, it does not suggest a means of dealing with the problem. The following sections provide ways of thinking about systematic, and externally induced change.

Barriers to Change: To change teachers' thinking about and implementation of research-based reading instruction practices, three potential barriers must be addressed: the availability and generalizability of the practices, teachers' belief systems, and school-level practices. Each of these barriers are briefly described below:

1. The Practices. The research-based practices are problematic for many teachers for two reasons: first, the research supporting particular practices may not be evident to the teacher. For example, reading methods textbooks, teachers' manuals for basal reading programs, professional books and educational journals may not regularly explicate the relationship among theory, research and practice (Beck, 1984; Tierney, 1984). Teachers may not realize that such a triad exists to inform instructional decisions. Further, the staff development programs may be fragmented and exclude a discussion of their research bases. If the resources available to the teachers have not explicated the role of research, theory and practice, teachers are barred from efficient and effective use of research. This study examined the resources available to teachers and the degree those resources explicate the theory-research-practice relationship.

The second practice-related barrier to teachers' use of research may be the nature of the research itself. The research may negate the teachers' experience and therefore be rejected, or the research may be over-generalized to contexts far beyond those in which the research was conducted. Such over-generalization, in many cases, renders the research unusable or inappropriate for context-specific use. An example of this problem is the concept of "wait time". The research was conducted in high school science classes (Rowe, 1974), and indicated that if teachers give students more time to answer questions during recitation, the responses from pupils would be qualitatively better. On the basis of this research, wait time has been accepted as a universal prescription for effective teaching, rather than as a practice that may or may not be applicable in a particular context. For younger students in different types of classes,

increased wait time may bore students and thereby cause serious classroom management problems. Such would be predicted by Kounin's (Kounin & Doyle, 1975) research and theory that suggest that instruction must move along at a relatively brisk pace to keep students on-task. The classroom management imperatives help to explain why many teachers who are trained in wait time quickly revert to their previous brisk pace.

If prescriptions for practice are not accompanied by information on the theories implicit in the work and the contexts in which the researchers conducted the research, teachers will have difficulty making judgments concerning appropriateness, and may therefore reject the practices out of hand.

2. Teachers' Belief Systems. The small, but expanding literature on teachers' conceptions and theories of practice leads one to conclude that ignoring teachers' beliefs in implementing change could lead to disappointing results. Teachers' implicit theories vary from teacher to teacher (Munby, 1983) and may be at odds with those of curriculum developers and administrators. Olson (1981), for example, found that eight teachers who were implementing a new science curriculum "domesticated" it to match their own implicit theories of effective instruction.

While most people feel that there is a relationship between teachers' beliefs and their actions in the classroom, this relationship has not been satisfactorily explicated. Teachers' theories may not be particularly coherent, and contradictory beliefs may be held by the same teacher. The relationship between beliefs and practices have been explored in the area of reading. Duffy (1977), for example, found that only 37 of 350 teachers in his sample held pure and strong conceptions of reading, and only four out of ten teachers selected from among the 37 exhibited classroom practices that consistently reflected their beliefs. Many of the teachers held "confused/frustrated" conceptions. A follow-up report by Buike, Burke and Duffy (1980) concluded that teachers' decision-making in reading classes seemed more related to classroom management and curriculum than to their implicit beliefs. Hoffman and Kugle (1982) used two measures of teachers' beliefs to determine the relationship between 35 teachers' beliefs about reading and their performance during reading instruction. They found, like Duffy, that there is little direct relationship between the beliefs, as measured, and performance in classrooms. However, Hoffman and Kugle concluded that the measures of teachers' theories, being preconceived by the researchers, were not representative of teachers' implicit theories. They recommended more open-ended procedures for eliciting teachers' beliefs.

Other researchers (for example, Bussis, Chittenden, & Amarel, 1976; Eisenhart, Schrum, Harding, & Cuthbert, 1986; Ignatovich,

Cusick, & Ray, 1979; Munby, 1983; Olson, 1981) inductively elicited teachers' theories, and were therefore more accepting of seeming contradictions and variations.

Recent work on how teachers and professionals think-in-action helps to explain how teachers' implicit theories affect behavior, and how these beliefs and theories can be modified to accept new and different research-based practices. Schön's (1983) work on reflective practice, for example, suggests that practitioners' knowledge-in-action is intuitive, tacit, and based on the experiences of trial and error. Reflection in action, or the ability to think about the knowledge-in-action process while it is taking place, helps practitioners deal with situations of "uncertainty, instability, uniqueness, and value conflict" (p. 50). Elbaz (1980, 1983) suggests that teachers hold three forms of practical knowledge (rules of practice, practical principles, and images), and these are used in different ways in practice.

Of most use to us in this project is Fenstermacher's (1979, 1986) conception of teachers' practical arguments. Fenstermacher's intent in developing the concept was to indicate the ways in which teachers can use research results: "as evidence, as information, as sources of insight for teachers to consider along with their own experiences" (1978, p. 175). The concept, then, of the practical argument is not meant to describe the ways in which teachers make decisions, but to provide a means of transforming teachers' beliefs from being subjectively to objectively reasonable. For Fenstermacher: "The relevance of research for teaching practice can be understood as a matter of how directly the research relates to the practical arguments in the minds of teachers" (1986, p.44).

A practical argument consists of three types of premises--value, empirical and situational--and concludes with an action. Research can help to change the truth value of the premises. But research that is presented in a "Research says. . ." statement that does not account for teachers' practical rationality, may be ignored or discounted. Further, mandated practices based on the research will be performed in a perfunctory manner, if at all (Richardson-Koehler, 1987).

3. School Level Practices. It would be a mistake to assume that the important and sole unit of change in instructional practices is the individual teacher working by him/herself. Research on effective schools provides information on the characteristics of schools that are particularly effective in increasing student learning (Bossert, 1985; Corcoran, 1985; Purkey and Smith, 1983). Clearly, it is the teacher who is affected by and mediates between many of these school level characteristics and student learning. Programs designed to change teaching of reading practices that ignore the context in which teachers operate may be doomed to failure.

Several researchers have investigated the ways in which teachers are affected by school factors. These researchers attempt to describe characteristics of schools with strong norms of improvement, reflective teaching and critical analysis of teaching. Little and Bird's (Little, 1981; Little, forthcoming; Little & Bird, 1983) work on effective schools suggests that collegiality among the teachers requires opportunities and support for discussions among teachers about teaching, peer observation and experimentation. Bird (1984) suggested that the school principal is in the best position to change the norms that make it difficult for someone other than a teacher to act as an expert in helping the teacher change practices. Ashton and Webb (1986) found that the way in which a middle school and a junior high school were organized affected teachers' sense of efficacy in those schools. Teacher sense of efficacy refers to an attitude on the part of a teacher that what s/he is doing makes a difference. Teachers with low sense of efficacy are not willing to confront new challenges, and do not see change as worthwhile.

More recently, Rosenholtz (1986) has investigated the school factors that affect teachers' commitment. She concluded that teachers' perceptions of their work are strongly affected by the organizational context in which they find themselves. For example, teachers who were identified as leaders in collaborative schools were those who "moved others toward fulfilling their instructional purposes." In noncollaborative schools, teacher leaders were defined as those who earned their reputation "by engaging in non-instructional activities, either by union-related leadership, or by their empathic responses to colleagues' classroom or personal problems" (p. 23). The degree of collaboration in a school was also found to be important in whether schools adopted innovations. Huberman and Miles (1984) found that change occurred in schools with norms that supported collaboration, cohesive relationships and reasonable tolerance for diversity.

Together, these more recent studies indicate that school factors strongly affect teachers' sense of efficacy and commitment, and thereby, the degree to and the manner in which they participate in changing their practices.

The above conceptions of factors that affect teachers' willingness and commitment to change were investigated in this study. In addition, the staff development model that was developed and tested in the third stage of the project was dependent upon knowledge of the school context as well as the literature on effective staff development processes (e.g., Griffin, 1983; Ward, 1985).

CHAPTER TWO

RESEARCH METHODOLOGY AND SITE

I. OVERVIEW

The purpose of this research program was to assess teachers' use of research-based practices when teaching reading comprehension and the barriers that prevent them from doing so, and to develop and test a school-based staff development process designed to change teachers' practices in reading comprehension instruction.

II. SAMPLE

Six schools in two school districts in a Southwestern urban area were selected for intensive study. Research offices in each of two school districts were approached, and the appropriate paper work prepared. Both research offices accepted the proposals. The first school district is a large urban, Southwestern school district with over 70 elementary schools, 20 junior high/middle schools and 15 high schools (including special projects housed in other schools or alternative facilities). The total student population is close to 55,000. Over half the students are classified as white. Hispanics constitute the next largest group of students (approximately 30%). Black, Native American, and Oriental students make up the difference.

The second school district is much smaller and borders on the one described above. This district contains 10 elementary, two junior and two senior high schools. The district services a little over 13,000 students of which 82% are classified as white, 13% as Hispanic, and the rest are Black, Native American and Asian.

We talked with a number of individuals in both school districts to select schools in which the principals and faculties might be interested in participating in a staff development program in reading instruction. At the same time, we did not want to be involved in schools with many different programs. One condition for our involvement was that at least two teachers at each of grades 4, 5 and 6 would participate; or, if the school were smaller, all teachers at these grade levels would participate. We discussed the project with seven different schools, and six agreed to participate.

The Schools

The six schools that participated in the study represented a cross-section of the general population of the city in their ethnic and SES compositions. They also represented a wide range of organizational characteristics. Five were part the large

district, and one (School D) is located in the smaller district on what was once the edge of town, an area which has become considerably more urbanized in recent years. These schools are described in depth in ethnographies developed by Peggy Placier, then a graduate student in Anthropology and Education at the University of Arizona, and now an Assistant Professor in the College of Education, University of Missouri. Her case studies are included in Appendix E. Short descriptions of the schools follow:

School A: Experimental. This school, described by the principal as serving an "upwardly mobile working class to middle class" population of first-time homeowners, has an approximately equal number of Hispanics and Anglos among its 380 students. The female principal is in her second year at the K-6 school, constructed seven years ago to accommodate a rapidly growing area of the city. The school scored in the middle of the district range on the 1986-87 Iowa tests, just below the 50th percentile. All seven 4-6th grade teachers participated in the study, two at each grade level and one 3-4 "combination." The teachers in this group range in experience from 0-8 years; one is a beginning teacher this year. One teacher in each grade has recently introduced Spanish as a second language (SSL) instruction, an enrichment program strongly supported by the parents in the neighborhood.

School B: Control. School B is located in a traditionally Hispanic, working class neighborhood which has lately seen new construction of apartments and moderately-priced townhomes. It serves a K-6 grade population of 580 students, 60% Hispanic, 33% Anglo, 5% Black, and 2% other. Fifty-five of the students qualify for the free/reduced lunch program, an indicator of the limited socioeconomic resources of their families. This school's Iowa scores for grades 4-6 averaged at the 46th percentile in 1986-87. The female principal is in her third year at the school. The 32-year-old school is overcrowded, the main building supplemented by an additional building and a series of "portables." There are three teachers at each grade level, and one at each level provides bilingual instruction. Of the nine 4-6th grade teachers, six agreed to participate in the study: 3 fourth grade, 1 fifth, and 2 sixth. All but one of the participants were veteran teachers, with at least ten years of experience.

School C: Experimental. School C is a newly opened school located in a semi-rural area of new home construction bordering an Indian Reservation. Just a mile from School A, it serves a somewhat similar population of 47.9% Hispanic, 45% Anglo, 3.9% Black, 2.2% American Indian, and 1% Asian students. Of the 452 students, 40% qualify for the

free/reduced lunch program. School C is a K-5 school, and all five of its 4th and 5th grade teachers participated in the study. The principal is female, and had been a principal for two years in another school before this school opened.

School D: Control. Located in rural-feeling but rapidly urbanizing neighborhood, School D was built 18 years ago for 450 students and has expanded in recent years into a large school (for this city) of 750. In 1986-87 it added 200 new students, and a new building was constructed to accommodate this growth. The student population is 97% Anglo, 1% Hispanic, and 2% Black, American Indian and Asian. Only 15% qualify for a free/reduced lunch. The school has just a few limited English proficient students, for whom ESL instruction is provided. Iowa scores for the intermediate grades were "above average" in 1986-87. The male principal is in his second year at the school. Grades 5 and 6 in this school are "departmentally" organized; the teachers in these grades identify themselves by subject area. Five of these 5-6th grade teachers, plus three 4th grade and one 4-6th grade LD resource teacher are participating in the study -- 9 out of a total of 12. They make up the largest teacher cohort in the study. They are an experienced group, averaging about 15 years of teaching.

School E: Pilot. This school is a 4-6th grade bilingual "magnet" school, an old school in one of the city's oldest neighborhoods, a downtown "barrio." A K-3 bilingual magnet school is located a block away. The 250 students at School E are 55% Hispanic, 25% Anglo (the percentage required by desegregation orders) and 12% American Indian. This is the male principal's first year at the school in that position; however, he was a classroom teacher there several years earlier. The school has ten classrooms, three at each grade level plus a 4-5th grade "combination" of 50 students with a two-teacher team. Each classroom also has a teacher aide, making for very favorable adult-child ratios. Because of its "magnet" designation, the school provides many special programs, including enrichment activities for gifted and talented students and a computer-based thinking skills program for Chapter 1 students. Seven of the eleven 4-6th grade teachers participated in the study; two at each grade level plus one of the 4-5th grade team.

School F: Experimental. This K-6 school in the midtown area of the city has two buildings, one built in 1929 and in need of renovation, the other built in the 1950's. Because of a desegregation arrangement, there are differences in the demographics of the primary and intermediate grades. Of the 358 total students, 100 are primary grade, minority children bused from another part of town. In the intermediate grades, these students return to their neighborhood school.

Therefore, the primary grade population is 35% Hispanic and Black; the intermediates, only 10-12%. The percentage of free/reduced lunch students in the intermediate grades is 20%. This is the male principal's third year at the school. All five of the 4-6th grade teachers participated in the study: one from each level, one 4-5 combination, and one special education teacher. All were veteran teachers, with over ten years of experience.

The Teachers

The teachers included those who teach reading, social studies, science, language arts, writing, special education and learning disabled reading, and English literature. The breakdown is as follows:

Table 2.1
Numbers of Teachers by Subject Matter

Grade	Rdg.	L.A.	Soc.St.	Wri .	SpEd/LD	Sci.	Eng.Lit	Total
4	11	1						12
5	5	1	3	1		1		11
6	6	1	1				1	9
3-4			1					1
4-5	3							3
4-6					3			3
Total	25	3	5	1	3	1	1	39

111. OVERVIEW OF RESEARCH PLAN¹

For the first phase, all grades 4, 5 and 6 teachers in the six schools were observed and interviewed, and all of their students tested. In addition, teachers in all schools filled out a questionnaire related to its organizational context and the principals of all schools were interviewed. During the second phase, one of the six schools was selected for pilot testing of the staff development process. The input from these teachers was used to further develop the process which was implemented and tested in three of the schools. The following year, although not a part of the original design, teachers in the control schools participated in the staff development process. We had promised we would provide staff development for them, and they had heard from other schools about this process and decided that was what they

¹A thorough description of the methodology will be included in the chapters that respond to the questions.

wished to receive.

Question 1: What are the research-based teaching of reading comprehension practices?

The professional literature regarding reading comprehension and instruction for intermediate grade students was identified and analyzed. For purposes of this project, reading comprehension is defined broadly, allowing for explicit definitions to emerge from the literature.

Two types of practices were investigated. The first type included practices emerging from very recent basic research and theory that has not received attention in applied settings. The second type of practices includes those that have been investigated in the classroom context.

All references were analyzed and categorized in terms of how they related theory, research and practice. The theoretical orientation of each investigated reference was ascertained using a modification of Harste and Burke's (1977) categories. Practice-oriented references lacking either explicit or implicit theoretical bases ["If it works, use it!"] were categorized as atheoretical.

The literature review resulted in a set of descriptions of research-based practices that were categorized and filed, and subsequently became an important element of the staff development program.

Question 2: To what degree do teachers use research-based practices in teaching reading comprehension?

The extent to which intermediate grade teachers are using research-based reading comprehension practices was investigated by using observation procedures that provided narrative records of teachers' actions and statements during the teaching of reading.

After developing the instrument and training observers, the reading instructional practices of each teacher were observed two time.

Question 3: What are the barriers to the use of research-based practices?

Two types of barriers were explored: teacher beliefs and knowledge about reading and the teaching of reading; and school level factors that may inhibit or enhance teacher change.

Teacher Beliefs and Knowledge about Reading: Teacher beliefs have been defined and identified in many different ways,

and different terms have been used to describe beliefs. For example, Tabachnick and Zeichner (1984) wrote about "perspectives", Bussis, Amarel and Chittendon (1976) about "internal mental processes", and Elbaz (1983) about "practical knowledge" and "rules of practice". While these terms are used in a similar manner, seldom are they explicitly defined. In a review of the literature on teachers' thought processes, Clark and Peterson (1986) found it difficult to organize and synthesize the literature on teachers' theories and beliefs, largely because of the lack of explicit definitions and descriptions of the terms.

For purposes of this research project, we used a definition of beliefs that derives from educational philosophers: a belief is a proposition or statement of relationship among things accepted as true (Fenstermacher, 1979, 1986; Green, 1971). Cognitive anthropologists have extended this definition to state that a value is placed on the proposition. For example, in Goodenough's (1971) analysis, to accept a definition as true is to value it in some way for "logical and empirical grounds or . . . social and emotional reasons" (p.25). As Eisenhart, et al (1986) pointed out, this definition has been used by cognitive anthropologists who have developed methodologies to investigate beliefs.

Within the five schools selected for this study, grades four, five and six teachers were interviewed concerning their beliefs about and knowledge of reading, the teaching of reading, and instructional practice. An ethnographic approach to the belief interviews (Spradley, 1979) was used in this project, and the interviews were analyzed using categories that emerged from the data.

School Factors: Three procedures were used to provide a description of school factors that could contribute to the use or non-use of research-based teaching of reading comprehension practices, and to predict the degree to which teachers would be willing to change their existing practices: a teacher questionnaire concerning organizational context, a principal interview on beliefs concerning teacher practice and change, qualitative descriptions of the school climate and organization, and nature of the reading curriculum.

Case studies of schools were developed by Peggy Placier who was involved as an observer from our initial contacts and meetings with principals and faculty. She also asked the classroom observers to observe certain school level factors, and has debriefed them and the principal investigators on all contacts with the schools. She also made periodic visits to the schools with the observers. These case studies are included in Appendix E.

Question 4: Can a school-based staff development model affect teachers' use of research-based instruction of reading comprehension?

A school-based staff development process designed to help teachers examine their beliefs about and practices in the teaching of reading comprehension and to introduce alternative ways of thinking and practices was developed and tested in three schools.

In one school, identified as being particularly collegial, we introduced the results of the research to date, discussed with them the staff development process we were considering, and tried out a practical argument process with two of the teachers. We then asked for input and suggestions from the teachers. On the basis of information from this pilot, the process was developed further.

Testing of the Staff Development Model: Faculty in the three schools designated as experimental were involved in the staff development process; two during the fall of 1988, and one during the spring of 1989. Following the staff development process, the teachers were interviewed and videotaped to determine whether their beliefs and/or practices had changed, and changes in the school organizational factors were assessed.

Question 5: Does the use of research-based reading practices affect student reading achievement in a positive direction?

A reading assessment plan was developed for all students in grades 3, 4, 5, and 6 in participating schools. These reading evaluations were necessary for two reasons: 1) to ascertain whether teacher practices in the teaching of reading affect reading achievement scores; and 2) to investigate whether a school-based staff development program designed to change teacher practices in the teaching of reading affects students' reading achievement scores.

Two formal tests were used to measure student reading achievement: the reading battery of the Iowa Test of Basic Skills, which is given in all the surrounding school districts in the Spring, and a test reflecting current research, the Illinois Goal Assessment: Reading. We chose the test after interviewing researchers at the University of Illinois who had developed it. Passages were selected with the assistance of P. David Pearson. Directions and procedures were adapted with the assistance and approval of Pearson and his staff. Forms of both tests appropriate to the students' grade levels were administered in the Spring of 1987, 1988, and 1989 to students in all participating schools. Since we were not interested in maintaining individual student data, the schools administered the Iowa Test of Basic Skills and provided information aggregated at

the classroom level. For test security reasons, researchers employed by the project received training in and administered the Illinois test.

Effects Staff-Development Model: Student scores from 1988 and 1989 were compared to arrive at class mean growth gains in the subcomponents of the tests. Each teacher in the five schools had mean growth score in at least one and in some cases two different years. Changes in student mean growth scores of teachers participating in the staff development model were compared with those who had not participated. This provided us with information on the relationship between teachers' use of research-based practices and student achievement as measured on these tests.

IV. DATA AND DATA COLLECTION

Table 2.2 represents the data collection and other activities that were conducted during the course of the project. One school was considered a pilot school, three as experimental schools, and two as control schools. However, this terminology should not suggest that a tight experimental design was intended. In fact, given our experience over the three years with the schools, and our own research inclinations, we could consider that each school represented a case, three of which we worked with in a staff development process in the second year of the project, and two in the third year.

To provide one example of why an intended tight experimental design would have been inappropriate, you will note in Table 2.2 that student data were not collected in the second year in one of the experimental schools. This is because the school ceased to be a school in the normal sense of the word. It became contaminated with an unknown environmental air-borne substance, and in the spring of two years in a row, the students were sent to other schools. The problem was finally attributed to sewer gas because of faulty installation of the lines, and the school resumed its normal activities in the year following our involvement. However, by then, most of the teachers and many of the students had transferred.

TABLE 2.1
DATA COLLECTION & ACTIVITIES WITH TEACHERS

Activities	Research Question	Numbers of Classrooms/Teachers					
		School 1 (pilot)	School 2 (control)	School 3 (control)	School 4 (exper.)	School 5 (exper.)	School 6 (exper.)
<u>Winter '87</u>							
1. Classroom Observation (2X50 min. each) (Baseline)	2 & 4	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6
2. Teacher Belief Interviews (Baseline)	3	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4-6	all tchrs. Gr. 4-6	all tchrs. Gr. 4-6
3. Ethnographic Data	3	School	School	School	School	School	School
<u>Winter-Spring '87-'88</u>							
4. School Questionnaire	3	all tchrs.	all tchrs.	all tchrs.	all tchrs.	all tchrs.	all tchrs.
5. Reading program interview	3	principal	principal	principal	principal	principal	principal
<u>Spring '88</u>							
6. Videotaping	4	2 tchrs.					
7. Video reflection interviews	3	2 tchrs.					
8. Staff Development - Pilot	3	all					
9. Student Achievement (ITBS)	5	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6
<u>Fall '88</u>							
10. Student Achievement (Illinois Test)	5	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6

Table 2.1 Cont.

Activities	Research Question	Numbers of Classrooms/Teachers						
		School 1 (pilot)	School 2 (control)	School 3 (control)	School 4 (exper.)	School 5 (exper.)	School 6 (exper.)	
11. Staff Development (group)	4					all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6
12. Videotaping (Baseline)	2&4					all tchrs. Gr. 4, 5, 6	all tchrs. Gr. 4,5,6	all tchrs. Gr.4,5,6
13. Video Interview	3&4					all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6
<u>Spring '89</u>								
14. Student Achievement (ITBS & Illinois)	5	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6	all Gr. 4,5,6
15. Teacher Belief Interviews	4					all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6
16. Videotaping	4&5					all tchrs. Gr. 4, 5, 6	all tchrs. Gr. 4,5,6	all tchrs. Gr.4,5,6
17. Video Interview	4&5					all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6
<u>Fall '89</u>								
18. Student Achievement (Illinois)	5	new stats.	new stats.	new stats.	new stats.	new stats.	new stats.	new stats.
19. Staff Development			all tchrs. Gr. 4,5,6	all tchrs. Gr. 4,5,6				
<u>Spring '90</u>								
20. Student Achievement (ITBS & Illinois)	5		all	all	all	all	all	

CHAPTER 3

RESEARCH-BASED TEACHING OF READING PRACTICES²

The first research question of our project asked, What are the research-based teaching of reading practices? Since the overall task of this project was to describe the relationships between research and practice in the teaching of reading comprehension, the answer to this question was a pivotal point around which the remaining questions would be operationalized.

Four main sources of information were used to answer the first question. They were research or scholarly literature, professional literature aimed at teacher audiences, comprehension chapters and sections of reading methods books, and teachers' manuals of basal readers.

This paper will describe the decision making, steps, and results involved in answering the first research question through the research or scholarly literature.

I. METHODOLOGY

The form of the answer to this question was obviously a literature review, but how this literature review would be conducted was not as apparent.

First, the nature of the literature to be included in the review needed to be established. It was decided that to answer this question, three criteria must be met: the paper/article must describe research; it must describe, suggest, and/or have tested a reading practice; and the stated purpose(s) of this practice must be to affect reading comprehension, and/or the effectiveness of the practice must be described through a measure of reading comprehension. Since our research questions were applied to fourth, fifth and sixth grade classrooms, we added a fourth criteria for inclusion, namely that the literature focus on students at or near these grade levels.

Operationalizing these criteria in the selection of papers to include in the literature review required definitions of terms. Namely, the way in which research, reading practice, and reading

² This chapter is adapted from a paper by Carol Lloyd, Deborah Tidwell, Patricia Anders, Ann Batchelder, Candace Bos, and John Bradley, entitled, Research-based comprehension instruction practices, and presented at the annual meeting of the American Educational Research Association Conference, New Orleans, April, 1988.

comprehension would be defined would affect the parameters of the literature review, and therefore the results of this part of the project.

Research was broadly defined to include theoretical papers, descriptive or correlational studies, and instructional intervention studies. A fourth category, opinion, was also included in our list of research types, but this category of research did not appear in our review. This permitted the identification of practices that had been suggested from basic research or theory but had not been directly tested.

Operationally defining a comprehension instructional practice that is recognizable in the literature was challenging. Most members of the research team and the experts we consulted had notions of what a practice is. Some thought it was very broad, for example, "using the basal," "reading in the content areas," or "questioning for comprehension." Others thought a practice was a very specific activity, for example, using particular types of worksheets, oral reading, or making predictions based on story titles or pictures. This definition was addressed methodologically through discussion among team members, and most importantly, through the literature itself as authors identified something as a practice. Certainly, if an author labelled an activity a practice, it was identified as such on the list of practices. Most of the time, however, practices were called something else, such as a skill, a strategy, or a method. Thus many practices were identified by the members of the project's research team. As practices were described in the literature, they seemed to share the following characteristics. First, a practice is observable. It is an activity a teacher or researcher undertakes to provide an opportunity for reading comprehension to occur. Second, it is describable. One who understands the practice can explain to another how to carry it out. Third, it is linked to a theoretical notion of the reading process. Though we intended to include practices without any theoretical base, all practices we have identified thus far have aligned themselves with a theory of reading comprehension.

Reading comprehension was the last term requiring a definition. Definitions of reading comprehension, however, are intertwined with theories of reading. Since we did not want to impose a theoretical stance on the literature review, we allowed reading comprehension to be defined by the authors of the literature we read. Thus, if an author described an effect of a practice on reading comprehension, then that paper had met the third criterion for inclusion in this review. This criterion was used regardless of how reading comprehension was described or operationalized. Though this procedure prevented any theoretical biasing on the data, theory was not ignored; the theoretical underpinning of study, which in almost all cases was explicitly identified by the author, was included in our analysis.

The criteria and definitions we established resulted in some limitations. Studies which may have described or tested a variable which theoretically or empirically has been shown to affect comprehension may not have been included. For example, certain vocabulary studies were not included because those studies did not test or describe the effects of a practice on reading comprehension.

Limiting our literature search to published articles also may have affected our conclusions. Using published studies might bias the data to those that have significant results (Glass, McGaw, & Smith, 1981). We wonder which practices, both identified and not identified in our review, have been studied but not reported in published documents due to a lack of statistical significance.

Sources of Research Literature

Two sources of information were tapped as the foundation for the literature review: (1) reviews and syntheses of reading comprehension research; and (2) original sources.

Syntheses and reviews. Several sources of research-based comprehension practices had been identified in the grant proposal. These included post 1980 journals for research; recent yearbooks, books in series and monographs; and post 1980 unpublished reports such as those found in ERIC. To read all relevant papers in these sources, however, would have necessitated a separate research project focusing on this task alone. Therefore, we decided to begin our literature review with syntheses and reviews of research.

In this study reviews were defined as formal, systematic reviews of the literature. Typically these reviews contained rationales for the reviews, methodologies for the reviews, as well as results and their related discussions. In contrast, synthesis pieces were typically defined as pieces, (e.g., articles, chapters, monographs) which presented a related set of literature for the purpose of supporting the author's premises. These pieces usually did not contain information regarding the methodology used by the author to review the literature. In comparison to the reviews, the synthesis pieces were not as comprehensive or systematic in their presentation of the literature. Our search identified few reviews of research on reading comprehension strategies. The most common format for reporting such information was found in syntheses.

Two criteria were established for inclusion in our review. First, the synthesis or review discussed research-based reading comprehension practices. Second, the paper was published in a peer reviewed journal or in a book edited by a scholar with an established reputation. It was felt that this method would

permit us to ascertain the research-based reading comprehension practices while reading only a sample of original sources, and thus answer our question in a timely fashion.

Syntheses and reviews were found in several sources. The computer search (described in the next section) identified reviews that were journal articles. However, since syntheses are often book chapters, and thus do not show up through a computer search, hand searches were required.

A majority of the syntheses and reviews were located through hand searches from the following five areas: (1) stacks in the University of Arizona library using call numbers which identified text with a reading focus (1980-present); (2) the 1986 Books in Print list (focusing on reading and specifically reading comprehension); (3) the shelves of reading professors at the University of Arizona (1980-present); (4) pre-1980 seminal reviews; and (5) citations from the above described syntheses and reviews. (See Appendix A for a bibliography of syntheses and reviews.)

Original Sources. Original sources were located through two processes: (1) from a search of original articles too current to be included in syntheses and reviews, and (2) from syntheses and reviews, where additional information was needed.

Current original sources were located through a computer search for research on reading comprehension published from 1984-1987, and through an ongoing hand search of key research journals from 1984 to present. We began looking for original sources from 1984 because Landscapes: A state-of-the-art assessment of reading comprehension research 1974-1984, compiled at Indiana University, provided an extensive review of reading research.

Two data bases were included in the computer search, ERIC and Psychological Abstracts. The ERIC search was conducted first and used a combination of the following descriptors: reading comprehension, research, teaching methods, teacher effectiveness, instructional improvement, grades 4-6, 1984 to date. This resulted in a list of 507 abstracts. While these descriptors were accurate, and a large number of appropriate studies were identified, the list also included studies conducted in non-English speaking countries and studies concerned with ESL and EFL students. Therefore, when the Psychological Abstracts search was conducted, 202 abstracts were identified using the following descriptors: reading comprehension, methodology-experimentation, empirical methods measurement, teaching methods, English Language, grades 4-6, 1984 to present.

In many cases the searches overlapped. Studies published in major journals and dissertation abstracts were consistently

found in both Psychological Abstracts and ERIC. ERIC contained more information on unpublished materials, university and publishers' technical reports, and papers presented at national conferences. Psychological Abstracts included studies in publications outside of education, such as medical and psychological journals.

Each abstract was read to determine the appropriateness of the study to our literature review. When the abstract did not provide enough information to make a decision about appropriateness, a copy of the article was pulled and skimmed in order to make a final decision.

Since current research articles may not have shown up in the computer search, research journals were hand searched for relevant articles. Journals were selected which emphasized reading research and which had occurred frequently in the computer search.

Syntheses often did not provide enough information on research studies to allow any particular study to be evaluated for appropriateness to the project. Syntheses left out such critical information as grade level of subjects, clear descriptions of strategies being studied, and, at times, the results of studies. To alleviate this problem, original sources referenced in syntheses and reviews were used to retrieve critical information missing in a synthesis or review.

Procedures for Reading Syntheses and Reviews

Once syntheses and reviews were identified they were assigned to be read and analyzed by one of five readers. So that consistency could be established across readers in terms of identifying practices and rating the various aspects of the practice, the readers were faculty members with expertise in reading comprehension and reading research. Further consistency was developed through training. During training the readers read and rated the same pieces independently. They then discussed the comprehension practices and their ratings.

Each reader was assigned to read and analyze one synthesis/review piece at a time. Within the piece the reader located reading comprehension instructional practices that were described by research in the piece being read. When a practice was identified in the piece, the reader listed on a confidence rating form the practice and the sources in the piece that were presented in support of the practice (see Appendix A). Each source was analyzed and categorized or rated in relation to the practice according to the following criteria:

1. Theoretical Category
 - A) None
 - B) Decoding/skills/behaviorist/information transfer
 - C) Strategies/schemata/metacognitive/cognitive/interactive
 - D) Whole language/psycholinguistic/transactive
2. Quality of the Study Rating (i.e., the rigor of the research and design)
3. Support for the Practice Rating (i.e., how well the results of the study support the practice)
4. Amount of Inferencing Rating (i.e., amount of inferencing needed to go from the theory or the results to the practice)
5. Usability Rating (i.e., based on the score how usable the practice would be in fourth through xth grade classrooms).

When enough information was provided to categorize and rate a source using the above criteria, the practice, as described by that source, was then rated for overall confidence. This overall confidence rating reflected, via each source, the reader's confidence in the practice as one supporting effective reading comprehension practice for fourth through sixth grades. All ratings were made on a three-point scale: high, medium, or low.

Since comprehension is affected by at least the reader, the task, the text, and the teacher, we did not want to lose sight of these variables in our analysis. Whenever possible, we included this information in our evaluations so that our confidence in a practice would reflect these.

When an overall confidence rating or ratings for a source could not be assigned by the reader due to insufficient information in the synthesis/review, the original source was reviewed and rated using the same criteria. This information was then added to the synthesis/review confidence rating form and the source and overall ratings were completed.

Analysis Plan

Analyzing Results From Syntheses and Reviews: After many syntheses and reviews were read, practices were sorted and categorized. This was accomplished by reconsidering identified practices from each of the confidence rating sheets and then grouping the practices that appeared to have the same general focus. This first sort resulted in fourteen categories of reading comprehension practices. Our list of practices has evolved since that first sort.

Our next step was to define discrete practices within each category and, when enough information was available, determine a confidence rating for those practices. Identification of these

practices was always accomplished through negotiation between two to three reading experts on our team. Interestingly, this process was frequently difficult. Most of us are accustomed to seeing practices as they are categorized and identified in methods and practice books. These practices have names such as Directed Reading Activity, ReQuest, and Anticipation Guide. However, the research literature sometimes identifies treatment groups rather than practices (e.g., Imagery Instruction or Content and Structure Group). This required us to name the practices. We tried to use names which incorporated the author's language about the practice/treatment, and which provided some description about the nature of the practice.

Next, summative information about original studies was transferred from the confidence rating forms from the syntheses and reviews onto a Practice Summary Sheet (see Appendix A). We then attempted to make confidence ratings for the practice which reflected a composite of ratings from all original studies cited in the syntheses and reviews. This was accomplished when there were a "reasonable" number of studies focusing on a practice and the ratings from these studies were consistent. This procedure would allow us to make some confidence ratings without reading all original sources describing these practices. This part of the analysis was also a negotiated process.

Gleaning information from syntheses and reviews did not always preclude our reading the original sources. Authors of these papers often had different purposes and perspectives than we did. Therefore, many did not answer all our questions, but were only useful in providing references to read. For example, some did not give enough information about the subjects, provide an adequate description of the practice, evaluate the quality of the study cited, or give information about the results. On many occasions, however, studies were described in more than one synthesis or review, and the information could be collated.

Analyzing original sources. Reading original studies became the next task to accomplish our goal of identifying and establishing confidences in practices. They were evaluated with considerable detail. A form was developed which evaluated practices using the same criteria developed for syntheses and reviews (see Appendix A).

Typically, instructional treatments described in experimental studies became our identified instructional practices. The effect of each treatment on subjects' reading comprehension determined the support for the practice. Instructional implications which authors of descriptive or correlational studies described as emanating from their results were also sources of practices. Our readers, however, were careful not to infer these practices, since the nature of these practices was often interrelated with a theory of reading comprehension and

instruction.

When original sources had been previously referenced in a synthesis or review, and the missing information was added to the practice summary sheet, an overall confidence rating was established for that practice via that study.

When original sources described practices already identified, they were added to the data base for each identified practice with their respective confidence ratings. When new practices emerged from these original sources, these were identified by an evaluation team of two to three researchers, and new summary sheets were developed.

The information about practices as described in the original studies provided a new perspective on the practices gleaned from the syntheses and reviews. It soon became apparent that some practices previously identified as being the same were in fact different. An author of a synthesis piece sometimes either generalized the nature of a practice or described one component of a complex treatment as the practice. Thus, it became necessary to read the "practice only" (treatment or instructional implication) for further refinement of practice identification. As before, identification of practices was a negotiated procedure. This overall process resulted in many restructurings of our Research-Based Reading Comprehension Practices list. Our current list contains 16 categories of practices subsuming 97 practices (see Appendix A for list and short description of practices).

As all information for a practice was collated, a final consideration about the correct practice identification was made by asking whether or not all the studies identified as describing the same practice actually described the same, or approximately the same, reading comprehension instructional practice. If not, the practice was re-evaluated as described above.

After the final sort of practices, a confidence rating for each practice was made, again through negotiation and consensus of two to three researchers. This last step was accomplished by considering the overall confidence ratings from each original study as listed on the Practice Summary Sheet. When these ratings were similar, as in the case when all or most studies had a high rating, then the practice would receive the common confidence rating. However, when the ratings from the various studies investigating the practice were inconsistent, the summative rating reflected those results. Comments were made explaining these differences.

II. RESULTS

The results of this study take the form of a comprehensive list

of research-based reading comprehension practices for grades 4-6 with accompanying confidence ratings (see Appendix A for list). Each confidence rating was elaborated to account for limitations and/or considerations regarding practice efficacy. As we worked with the data and began to make confidence ratings, it became apparent that this elaboration was necessary for the following reasons. Some practices were found to be effective for readers with certain attributes, usually the "low achieving" readers, but not for other readers. Other practices were designed for specific types of text, such as stories or expository text. Another factor affecting the practice was its usability in the classroom. Some practices were very effective in improving the reading comprehension of students but may have required much teacher and class time, one-on-one instruction, or rewriting materials. Since we wanted our final results to assist in the translation of research to practices by both teacher educators and teachers, these factors had to be an integral part of the information we would be transmitting.

The following examples of practices with completed ratings will illustrate some of the points made above.

Informed Strategies for Learning (ISL) is a well-researched practice that is designed to teach children metacognitive strategies they may apply across reading contexts. We located six citations regarding this practice, all of which indicate a high support of ISL. Therefore, we have given this practice a high confidence rating. Comments about this practice would include remarks about the extended length of time required to produce strategic readers but with an emphasis on the positive results on children's reading comprehension.

Another practice for which we have determined a confidence rating is aimed at teaching children the meanings of words before they read to promote their comprehension. The synonym drill practice teaches the meanings of targeted words through drills which match these words with synonyms. Six studies are referenced which address this practice, and all of these have been given a low confidence rating. Therefore, the overall confidence rating in the practice was determined as low. Comments about this practice as a means to increase comprehension are that most studies were conducted with learning disabled students, most had a small number of subjects, and though some studies showed positive results on subjects' knowledge of vocabulary, there were very poor results on readers' comprehension.

A third practice for which we have an established confidence rating is the practice of asking students to create pictures in their heads while reading, or visual imagery. The process of determining a confidence rating in this practice was not a linear one. Of the 15 studies we found investigating this practice, we have been able to give 13 ratings. However, these ratings

are inconsistent: 2 were rated low, 1 medium-low, 5 medium, 2 medium-high, and 3 high. Some of the lower ratings were due to small or no effects of the practice, to the duration of treatment, or to the teacher time required when 1:1 instruction was used. Other ratings were affected by the interaction of type of text used or the content area of text. Also, in some cases we questioned whether or not a study had considered the learning requirements of students. For example, some instructional interventions told students to "make pictures in their head while reading" but did not include time to learn this strategy before testing for its effects.

The description of our data analysis explained the criteria and decisions involved in making confidence ratings for a practice based on single studies. The examples above have illustrated the considerations used when determining a confidence rating in a practice based on all available information.

III. CONCLUDING REMARKS

We intend that the nature of this literature review will assist researchers, teacher educators, and teachers in making a meaningful transition between research and practice. By considering the context in which these practices may or may not be effective, we are attempting to promote an atmosphere of decision-making among teachers and teacher educators in which they will use and promote practices thoughtfully. We also hope to amplify the concerns of many educational researchers who strive to examine instructional questions with a consideration for ecological validity.

Tierney et al (1988) describe the relationships between theory, research, and practice in the following way.

The word remote might be used to describe the usual relationship between researchers and teachers, between theory and practice, and between teaching and learning. Researchers seem content to suggest principles of effective teaching, espouse new methods, or delineate the implications of theory for teaching and learning, while remaining separate from the everyday forces in operation in real classrooms. Researchers seem to prefer advising teachers from a distance. Teachers tend to display similar predilections. They seem content to keep researchers at bay and sometimes even maintain a distance between themselves and their own students. (p. 207)

The results of this review on research-based reading comprehension practices will hopefully make those relationships less remote.

CHAPTER FOUR

TEACHERS' READING COMPREHENSION INSTRUCTIONAL PRACTICES³

I. BACKGROUND

The second question of the study asked to what degree are teachers using research-based practices in their classrooms. Several studies indicate that teachers state that they do not use research in their teaching (e.g. Bergen, 1976; Waxman, et al., 1986). This presents a curious paradox: if one purpose of research is to investigate variables that promote reading success, then why would teachers say they ignore the results of research which would seem to have strong implications for teaching?

Rather than reject research, perhaps teachers simply don't know that they use research in their teaching. Further, perhaps teachers state that they do not use research for a variety of reasons: lack of awareness of research, notions that research is not related to teaching, feelings that research is "too confusing," and so forth.

Two choices seemed available to obtain this information; directly ask teachers about their reading comprehension practices, or observe teachers in the classroom during reading comprehension lesson. Directly asking teachers was eliminated for two primary reasons. The first pertains to the inaccuracy of self-report data, with studies indicating that self-reports are less reliable than objective observation (Borg & Gall, 1983). Another concern deals with the fact that teachers may not be familiar with some practices, or, if they are familiar, they may not share common definitions of the practices. They also may use particular practices but not be aware that they are using them, or they may not be able to describe the practices in ways that fit with the terminology of the investigators. There is also the possibility that teachers may use practices that are unknown to the investigators which could therefore be overlooked. All of these reasons would make the gathered information confusing and invalid. Another reason for not using self-report pertains to the possibility of biasing the results. If practices were directly discussed with the teachers, they would be aware of the exact focus of the study and hence tend to alter their responses in a perceived favorable direction. If practices were not

³ This chapter is taken from two papers: Mitchell, J., Clarridge, P., Gallego, M., Lloyd, C. & Tidwell, D. (1988). Teachers' comprehension instruction practices. Paper presented at AERA, New Orleans; and Richardson, V., Anders, P., Tidwell, D. & Lloyd C. (1990). The relationship between teachers' beliefs and practices. Paper presented at AERA, Boston.

discussed with teachers, bias might be more easily avoided.

Therefore, the decision was made to gather data through classroom observation. The first task was the development of an appropriate observation instrument; therefore, we reviewed observation as a method of inquiry.

Evertson and Green (1986) discuss the history of classroom observation as one consisting of four phases. Phase One was the exploratory stage during which the focus was on whether classroom behaviors could be validly and reliably identified. Phase Two was the stage of instrument development and some descriptive, experimental, and training studies. Phase Three, which goes from 1972 to the present, explored how teacher behaviors were related to student performance. Phase Four, which paralleled Phase Three chronologically, is a period of "expansion, alternative approaches, theoretical and methodological advances, and convergence across research directions in the use of observational techniques to study teaching" (p. 162). During this phase, a linguistic approach to the study of teaching-learning processes began. What we were interested in investigating was an uncharted area; although we were interested in a linguistic approach, focusing on the instructional interaction between teacher and students during a lesson on reading comprehension. The development of the instruments for this instrument clearly fits into Evertson and Green's Phase Four.

The purpose of the classroom observations in this study was the foundation for the development of the instruments. The focus on reading comprehension instruction dictated that the observations would take place during teacher defined reading comprehension lessons and that the observation would provide reliable, accurate information about the reading comprehension practices of each teacher observed. Building on information from studies on the stability of the teaching situation (Brophy, Coulter, Crawford, Evertson, & King, 1975; Calkins, Borich, Pacone, Kugle, & Marston, 1978), the decision was made to observe twice in each classroom, for the duration of a lesson in reading comprehension as defined by the teacher. The unit of observation was large, consisting of reading comprehension practices. Because we were not looking for small repetitive units, or behaviors, it was felt that the number of observations need not be numerous to obtain reliable data. Another reason for two observations was that teachers teach reading in very similar ways from day to day, and, therefore, two observations would be sufficient to obtain a general sense of the presence or absence of research-based reading comprehension practices as well as what their practices are.

Several articles were reviewed to inform the research team about the various alternative approaches toward the conduct of

classroom observation and to establish criteria to guide the development of the actual observation instruments used in this study. Some criteria concerned validity issues, such as clear and unambiguously defined terms, and that items must be exhaustive of the dimensions being studied as well as mutually exclusive. Other important concerns dealt with keeping observer inference as low as possible, and describing the degree to which inference does have to be made. Further notions addressed the necessity of training the observers to a high level of reliability and objectivity.

Some articles provided suggestions based on the observation techniques used in other studies. For example, Durkin (1978) described categories of comprehension of instruction, assessment, application, assignment, helps with assignment, review of instruction, preparation for reading, prediction, time, activity, audience, and source. Ratekin, Simpson, Alverman, and Dishner (1985) recorded activities at one-minute intervals and categorized data according to organizational setting, instructional resources, instructional aids, instructional methods, inferred instructional purpose, and guidance materials. Ysseldyke, Thurlow, Mecklenburgh, and Graden (1984) noted the teaching structure - entire group, small group, or individual. They also used seven 10 second intervals, noting the activity, task and teaching structure during the first 10 seconds and then the remaining events during the other six 10 second intervals. Ruppel and Mangano (1982) discussed inter-observer agreement, intra-observer agreement, and criterion related agreement, providing an awareness of the differences among the three.

In general, classroom observational studies can be viewed on a continuum: on the one end are studies where researchers have identified all the variables of interest, usually in the form of a checklist, and observers note and/or rate the frequency of occurrence, presence/absence, or duration of those variables during classroom observations. Characteristic of these studies are a prior identification of variables to be studied; objectively defined variables not subject to observer interpretation; and highly structured, behaviorally based instrument formats.

On the other end of the continuum are those studies where researchers describe and analyze classroom events by transcribing what transpires during an instructional segment and then examining patterns which recur across these observational data. Characteristics of these studies are variables of interest which are grounded in the observational data; a need for some degree inference on the part of researchers in the interpretation of the data; and open-ended instrument formats which admit a wide variation of behavior.

The latter type of approach to classroom observation was selected to guide the development of observation instruments for this study for three reasons:

- o Since the identification of reading comprehension practices (Question 1) was proceeding simultaneously, firm definitions of practices would not be available to guide the development of instruments needed for the classroom observations.
- o It was desirable to identify the context of instruction in which research-based reading comprehension practices were used to arrive at a sense of how the practices related to the larger instructional focus of the lesson. Two types of contexts were potentially important: the sequence of the practice within a teaching activity, and the structure of the teaching situation (large group, small group or individual).
- o This type of approach to observation allowed for the inclusion within the data of unanticipated classroom events, and therefore, unexpected practices.

II. METHODS

Subjects

The subjects involved were 38⁴ intermediate classroom teachers from six elementary schools in two southwestern school districts. The grade level and subject matter taught are described in Table 4.1.

Table 4.1

Grade	Rdg.	L.A.	Soc.St.	Writ.	SpEd/LD	Sci.	Eng.Lit	Total
4	11	1						12
5	5	1	3	1		1		11
6	6	1	1				1	9
3-4			1					1
4-5	3							3
4-6					2			2
Total	25	3	5	1	2	1	1	38

⁴ While the total number of teachers in this study was 39, only 38 had volunteered during the Spring. One additional teacher volunteered the next fall, and a belief interview was conducted with him, but he was not observed, using this procedure.

Procedures

Observation Instruments. Three instruments were developed for the classroom observations. The Pre-Observation Instrument was used to obtain a description of the classroom layout and context of reading instruction, as well as materials to be used and the students involved in the lesson.

The Timed Narrative Record was used to record classroom events which happened during the observation period. This instrument called for the observers to record as accurately as possible what the teacher was saying during the lesson, and to record in shorthand teacher and student actions, such as student response (SR), teacher writing on the board (TWB), student question (SQ), students oral reading (SOR), and teacher roaming around the room (TRM). This data gathering technique is similar to one commonly used during classroom observations for clinical supervision (Goldhammer, Anderson, & Krajewski, 1980). Similarities extend to the decisions made prior to observation. In clinical supervision, the observer first determines which aspect of the classroom activities are to be the focus. It is then necessary to decide what data will be collected and how. The most appropriate measure of a teacher's implementation of a strategy seemed to be the teacher's verbal utterances during the lesson, along with a shorthand indication of activities. Hand recording is often the instrument of choice in clinical supervision, and seemed adequate for this situation because it was less intrusive into the teaching situation than other methods of data collection (e.g., audio or video tape recording). In both clinical supervision and this study, it was important that the observers practice note taking to increase their speed, as classroom activities are often multiple and spontaneous. The development of a shorthand is also recommended. The final commonality deals with a desire to represent the situation as objectively as possible.

This narrative was written for ten minutes, followed by a two minute "sweep" during which time the observer noted classroom characteristics and student activity. Cycles of narrative and sweep were repeated throughout the remainder of the observation.

A Follow-Up Questionnaire (see Appendix B) was completed after the observation, which asked for impressions of the observation experience that included classroom management issues, observer reactions, and teacher comments.

Classroom Observers

The classroom observers were four graduate associates who worked for the project in a variety of capacities. Each observer had a background in classroom teaching. Because of the nature of the observation procedure, a thorough knowledge of reading

comprehension issues and practices was not thought to be necessary.

Observer Training

Over a three-week period, the four observers met for eight hours with two of the researchers to discuss the observation procedures and to receive training in the use of the three instruments and in the shorthand procedures. Particular attention was given to the format of the Timed Narrative Record, the type of record to be obtained during the ten minute observations and the two minute sweeps and the shorthand notation to code teacher and student behaviors. Videotapes of teachers teaching reading comprehension were used to give observers practice in writing the Timed Narrative Record. After each videotape, observers compared results and discussed terminology and descriptive information. Observers were continually reminded to make no interpretations during the observations but to record objectively what the teacher was doing and saying, using his/her exact wording if possible. At the conclusion of the training, the four observers took field notes of a 15-minute videotape they had not seen before. Line by line comparisons of the four sets of field notes revealed a high degree of similarity among the observers in transcription practices as well as use of the shorthand coding system to note teacher and student behaviors.

Midway through the actual observations, the observers met with the trainers and reviewed their activities, elaborating on those aspects of the observations that were going well, questions that may have arisen, and areas that needed special attention.

Classroom Observation

Initially, the observer contacted the teacher and set up a time to observe the teacher twice when reading comprehension was being taught. The observer arrived early, and filled out the Pre-Observation Instrument, indicating the layout of the room, what materials were to be used by the students, and any general reactions to the classroom or the teacher and students.

The observer then recorded information using the Timed Narrative Record. The duration of the recording depended on the length of the reading comprehension lesson, as determined by the teacher being observed. The average length of both first and second observations was 40 minutes, with a range from 13 minutes to 80 minutes. Average observation times by school are as follows: School A = 50 minutes, School B = 35 minutes, School C = 38 minutes, School D = 38 minutes, School E = 38 minutes, and School F = 44 minutes.

Following the lesson the observer filled out the Follow-Up Questionnaire. The written narrative was then typed, in as

detailed a manner as possible, and the shorthand was included as these actions occur.

Videotape Observation

During the fall, 1988, a subset of the teachers and a new teacher to one of the schools--14 teachers in all--were videotaped during reading instruction. These tapes were taken before the staff development program was provided in three of the schools, and were used as an element of the program to allow teachers to examine their beliefs and empirical premises in conjunction with those of current research on reading instruction. These tapes were used as additional evidence concerning teachers' practices, particularly related to the use of the basal.

III. ANALYSIS OF THE DATA

Narrative Observations

The transcribed observational Timed Narrative Records analyzed as follows by three coders, all with advanced graduate degrees in reading:

1. Lesson Theme. First the entire transcripts were read to gain a sense of the teachers' instruction for the entire time period. Next, the transcripts were divided into one or more lessons according to such criteria as the general nature of instruction, the type of materials, the topic maintained, or other cues given in the transcripts themselves.

Lessons had recognizable beginnings and endings, identified through teachers' talk. Additionally, lessons consisted of a central purpose or activity to which all teacher comments related. As a lesson was identified, it was described in a brief statement, or lesson theme, to capture the overall goal of the lesson and to provide a context for focuses and practices, described in the following sections.

2. Focus. Within each lesson, one or more focus areas could be identified. The term "Focus" signifies an instructional genre or a category of instructional activities. Eighteen such focuses were identified in the review of research about reading comprehension (see Chapter three) and these same categories were used to identify focuses within the teacher lessons.

3. Practice. Frequently, one or more specific practices could be identified related to each focus. A practice was defined as a particular instructional activity which could be matched to one of 97 discrete research practices identified in the literature base of syntheses and reviews of reading comprehension instruction (see Chapter Three.)

To clarify the categories described above, an example might be helpful. In one transcript, a teacher conducted a pre-reading lesson, involving several activities designed to prepare the students to read a story, such as defining vocabulary words, activating prior knowledge, etc. The lesson then ended. For this lesson, then, the lesson theme was pre-reading; focuses were vocabulary and prior knowledge; and practices were those specific segments of the transcript which matched one of the 96 discrete practices identified in the literature search. Thus lesson theme, focus and practice are roughly analogous to structure, topic and strategy, respectively.

The three coders participated in eight two-hour pre-coding training sessions in which the above procedures gradually evolved through discussion and consensus. In all, six transcripts were discussed and coded during these sessions. The remaining 70 transcripts were then distributed among the coders at the conclusion of the consensus training process. These transcripts were coded individually by the three coders, with any questions raised and resolved through group discussion.

After each transcript was coded for lesson themes, focuses and practices, these data were tabulated. The 76 transcripts of the 38 teachers included 27 themes and 466 practices, incorporated within 15 focus areas. In addition, there were other practices which did not match the research-based practices from the synthesis and review list. These practices were designated by focus area only.

The complete array of practices (including those unspecified except as categorized by focus) according to lesson theme is shown in Figure 4.1. For this analysis, repetitions of the same practices throughout a lesson were not tabulated. Therefore, if numbers of times practices were employed during a lesson were used as the index, the total of practices would be even higher.

These data can be further specified according to the number and type of discrete practices within each focus. For example, the distribution of the 13 types of discrete practices listed under the focus of "Prior Knowledge" according to lesson theme is shown in Figure 4.2.

Videotaped Observations

Two researchers observed four categories of teachers' practices as captured on the videotapes and in the narrative observations. What follows is a description of how each of these categories was operationalized, and the results of the analysis:

Use of Basal: To describe teachers' use of basal readers during reading instruction, lessons which included basals were examined to determine the degree to which a teacher used the particular

Figure 4.1
All Practices

FOCUS	THEME																											
	Comprehending Cartoons	Comprehending Expository Text	Comprehending Graphs	Comprehending Paragraphs	Comprehending Poetry	Comprehending Stories	Distinguishing Fact & Fiction	Distinguishing Same & Different	Finding Main Idea/Details	Identifying Comprehension Strategies	Learning About an Author	Learning About Making Up Questions	Learning Cause/Effect	Learning Figurative Speech	Learning Parts of Speech	Learning Punctuation	Learning Syllabication/Accents/Vowels	Learning Vocabulary	Previewing/Pre-reading	Prewriting	Reading Plays	Reading Students' Written Work	Sharing Books	Understanding Acronyms	Using Comprehension Skills (Work, Write)	Using Encyclopedias	Writing Book Reports	
Background Knowledge	3	8			1	4	2	1	3		1			1		1		2	9	1			1	1		2		84
Text Characteristics	2	6	1	1		20	1	1	3				1	2		2	1	1	6	1				1				50
Vocabulary		11			1	5	1		1					5	1	1	1	12	4						3			92
Independent Study Strategies																												0
Imagery		3			1	5								1														10
Self-Monitoring/Metacognition		1				3				1						1			1	1								8
Teacher/Text Generated Questions	2	9	1	1	5	5	3	1	7		1			4	2	1	5	7			2	1	1	5	1		111	
Self-Generated Questions					1						1							1										3
Modality	1	7			4	30	2		4					4	2		1	4		1	2	2					62	
Evaluation/Feedback		2				6											1											9
Reading & Writing				1		8	1		1		1			2					1	2		2			1			22
Critical Reading																											2	0
Integrate Text-Based Ideas		1				4													1									6
Attention/Selection		2			1	4													2									9
Memory & Retrieval																												0
	8	50	2	3	13	23	10	3	19	1	3	1	1	19	1	9	4	21	36	5	1	7	2	2	11	1	2	466

Figure 4.2
Prior Knowledge
Practices

	Comprehending Cartoons	Comprehending Expository Text	Comprehending Graphs	Comprehending Poetry	Comprehending Stories	Distinguishing Fact & Fiction	Distinguishing Same & Different	Finding the Main Idea/Details	Learning About an Author	Learning Punctuation	Learning Figurative Speech	Learning Vocabulary	Previewing/Prereading	Prewriting	Reading Students' Written Work	Sharing Books	Using Comprehension Skills (wbk, wksht)	
BACKGROUND KNOWLEDGE																		
Providing BK Statements	1	1		1	5												8	
Teaching/Using Analogies					2	1			1		1						5	
Reading Multiple Texts (Same Topic)																	0	
Advance Organizers																	0	
Discussing	1	4			17		3						5		1	2	33	
Brainstorming		2			2								1	1			6	
Confronting Misconceptions					1												1	
Previewing Stories					2												2	
Predicting Characters' Actions					5											1	6	
Reading Headings					1												1	
Predicting Story Events	1				7												8	
PREP																	0	
Lecturing							1										1	
	3	7	0	1	42	0	1	4	0	1	0	1	6	1	1	1	2	71

lesson format suggested in the basal reader. Teachers' practices in this category were then classified as being either flexible or inflexible.

As indicated in Table 4.2, 31 of the 38 teachers were observed to be using basal readers during reading instruction. Twenty-one of those teachers were categorized as inflexible in their use, while ten were categorized as flexible. Ten of the 14 teachers videotaped used basals during reading instruction, four being inflexible and six flexible.

TABLE 4.2
Numbers of Teachers Categorized by Observed Reading Practices

<u>Reading Practice</u>	<u>Narratives</u>		<u>Videotapes</u>	
	Yes	No	Yes	No
Uses Basals	31	7	10	4
Inflexible Use	21	10	4	6
Background Knowledge	8	30	5	9
Oral Reading	26	4	9	3
Interruptions	15	11	9	-
Vocabulary: In Context	15	16	6	5

Consideration of Students' Background Knowledge: This analysis focussed on specific instructional segments within a lesson where student background knowledge was addressed. How a teacher considered students' background knowledge in their instruction was divided into two categories: Strong consideration, and weak-no consideration. Strong consideration referred to teacher instruction that incorporated background knowledge in an integrated and meaningful way (Example: reading a story to the students which provided background knowledge for the upcoming story to be read by the students, followed by students actively engaged in a discussion of their own similar experiences). Weak-no consideration referred to teacher instruction that incorporated background knowledge into the lesson through mentions or reminders, involving little or no student interaction.

Eight of the 38 teachers were judged as considering students' background knowledge in their lesson presentations in the narratives. Five out of 14 teachers incorporated background knowledge in lessons that were videotaped. In addition, videotapes provided elaboration on the quality of teachers' background knowledge instruction labeled "strong." Such instruction included providing:

- o background experiences. (Example: honey taste tests as a prereading activity for a story about beekeeping (Fc⁵));
- o background information (story grammar). (Example: teacher orally reads a ghost story, with children choral reading from cue cards the scary sounds in the text, as a prereading activity for a story with similar text structure and vocabulary of sounds (Fd));
- o integration of students' background knowledge. (Example: during the reading of a story teacher provides prompt questions that get students actively involved in a discussion of their own knowledge of what is real about animals and how that is different or the same from the way the author depicts animals (-a)).
- o relation to previous lesson. (Example: teacher relates skills to previous lesson by having students brainstorm what they remember and recording answers on board, tying in present lesson to information on board (Ab)).
- o own experiences. (Example: teacher shares own story of experience with trains as part of prereading a story about a train that doesn't run (Ab)).

Other background knowledge practices included: Reminding students of a previous lesson about information from text, strategy or process, lesson topic; asking students about their experiences - teacher asks students to share their experiences; asking students about their experiences/ knowledge; telling their own experience about text ideas, or about strategy, process or skill; providing background information through analogy/similar situation, or by directly telling information.

Oral Reading and Interruptions of Students' Oral Reading: First, it was determined whether or not teachers had students read the text orally. Next, teachers' responses to oral recitation were analyzed according to the following categories: 1) no interruptions; 2) interruptions signalled by students' misreading or hesitancy; and 3) interruptions with no clear signal.

Determining when teachers used oral reading was assisted by framing the definition of oral reading as a preferred practice in terms of students' first exposure to a text. Of the thirty-eight teachers analyzed from classroom observations, twenty-six involved students in oral reading in association with first exposure to text (fifteen interrupting students during oral reading). Of the fourteen teachers videotaped, nine used oral reading as a first exposure practice. (Three teachers in the

⁵ For purposes of providing anonymity for the teachers, we identified teachers in our data by two letters; the first referring to the school, and the second to the teacher.

videos (Ad, Fb & Fe) used oral reading as a post reading activity with varied purposes ranging from oral rereading of the silent reading assignment to oral reading of specific sentences as confirmation of answers to comprehension questions.)

Oral reading practices were observed in three scenarios:

- o traditional round robin reading--encircled group of students reading orally, order of reading determined by the location of the student in the circle;
- o modified round robin--students randomly assigned a page or paragraph to read, or students volunteer to read;
- o paired oral reading--teams of two students take turns reading aloud while partner reads silently and provides help.

While teacher interruptions during oral reading were categorized by signalled and unsignalled prompts, analysis from the videotapes provided additional subcategorizations. Teacher responses to signalled interruptions fell into four subcategories: (1) provided phonic sound or morphemic unit; (2) provided whole word; (3) provided phrase or sentence; and (4) provided definition/related information. Often teacher responses incorporated several of these subcategories within one interruption. Equally as varied in use were the three subcategories of teacher responses to unsignalled interruptions: (1) provided word; (2) provided phrase or sentence; and (3) provided definition/related information.

Vocabulary: How a teacher addressed vocabulary instruction was categorized according to her consideration of context. When teachers presented words without directly relating their meanings to the text, these practices were categorized as out of context. When teachers discussed the meanings within the context of the ideas in the text, these practices were categorized as in-context vocabulary instruction.

Thirty-one of the 38 teachers were observed teaching vocabulary. Fifteen taught vocabulary in context to the text to be read, while sixteen taught vocabulary out of context. Eleven teachers in the video tapes taught vocabulary, with six using instruction in context and five using instruction out of context. Vocabulary instruction out of context included: phonetics/pronunciation, definition/dictionary work, and isolated sentences (not text related). Vocabulary instruction in context included: sentences from story to be read, and vocabulary instruction occurring during reading. Teachers often combined instructional approaches within a context focus. For example, one teacher labeled as using out of context instruction listed words on the board, asked student to chorally pronounce each word, then assigned students to look word definitions up in the dictionary (Fa). A teacher labeled as using in context instruction asked

students to read specific sentences from the story to be read and asked them to define the word using context of the sentence (Ac). Some teachers incorporated both in context and out of context approaches within their vocabulary instruction.

IV. DISCUSSION

On the surface, these data appear to contradict other research findings that teachers do not use research-based practices in classrooms. Teachers in the present study employed an average of 3.8 practices per lesson. However, the first part of the analysis only identifies teacher practices which match categories of research-based practices. In looking in depth at the use of certain practices such as consideration of background knowledge, the picture changes. Many teachers in this sample did not use practices related to background knowledge at all, or when they did, it was employed in a quite perfunctory or inappropriate manner. Further, other teacher practices which are not research based, were not tabulated for this analysis. If teachers' use of research-based practices were considered in light of their use of other practices, a wholly different picture might emerge.

The most frequently occurring lesson theme was Comprehending Stories. Of all the lessons which were observed, 38 percent consisted of Comprehending Stories. Perhaps this is the dominant type of reading comprehension instruction offered by these intermediate grade teachers. Or it may be that teachers had a rather narrow definition of what constituted reading comprehension instruction. It should be recalled that teachers self-selected the time and type of lessons which would be observed. Teachers may not have been as clear about other types of lessons fitting within the rubric of reading comprehension as they were about Comprehending Stories. To further investigate the role of Comprehending Stories within reading comprehension instruction, longitudinal studies should be carried out with frequent or random observations rather than self-selected observations.

CHAPTER FIVE

TEACHER BELIEFS AND THE SCHOOL CONTEXT:
FACTORS AFFECTING TEACHERS' USE OF RESEARCH-BASED PRACTICES

Two factors were examined as possible influences on the teachers' use of research-based teaching of reading comprehension practices. These two factors were teachers' beliefs about reading, learning to read and teaching reading, and school organizational factors.

I. TEACHER BELIEFS⁶

The small but expanding literature on teachers' conceptions and theories of practice leads one to conclude that ignoring teachers' beliefs in implementing change could lead to disappointing results. There is some evidence to indicate that teachers adapt or adopt new practices in their classrooms if their beliefs match the assumptions inherent in the new programs or methods (see, for example, Hollingsworth, 1987, and Munby, 1984). Thus, understanding teachers' beliefs is crucial to the development and implementation of new programs and effective inservice education.

The purpose of this section is to describe the results of a study of teachers' beliefs and theories about reading comprehension, learning to read and the teaching of reading comprehension, and to determine if these are related to their practices as discussed in Chapter four.

The Study

The first step in exploring teacher beliefs, however, was to develop a valid way to determine teachers' theoretical orientations in reading. The next section will describe an attempt at such a method, and the findings.

The Sample: The participants were thirty-nine 4th, 5th and 6th grade regular and special education teachers who felt they taught reading comprehension, even though they may have been specializing in Social Studies or English. These same teachers were also observed (Chapter Three), videotaped, underwent a video-tape reflective interviews, and participated in a staff

⁶ Material for this section of the chapter is taken from: Richardson-Koehler, V. & Hamilton, M.L. (1988). Teachers' theories of reading. Paper presented at the annual meeting of the American Educational Research Association. New Orleans; and Richardson, V., Anders, P., Tidwell, D., & Lloyd, D. (1990). The relationship between teachers' beliefs and practices. Paper presented at the annual meeting of the AERA, Boston.

development program.

Teacher Beliefs: For purposes of this study, we used Harvey's (1986) definition of a belief system as a "set of conceptual representations which signify to its holder a reality or given state of affairs of sufficient validity, truth and/or trustworthiness to warrant reliance upon it as a guide to personal thought and action" (p. 660). The belief interviews used an adaptation of the elicitation heuristic technique, developed by anthropologists to determine belief systems in groups of people (Black, 1969; Black and Metzger, 1969; Kay and Metzger, 1973; Metzger, 1973). While anthropologists attempt to determine the belief systems of groups of people, this study focuses on the individual, although there may be some beliefs that were common to all of our informants and, therefore, may be described as beliefs of upper elementary teachers of reading.

Within this framework, beliefs consist of a set of assertions held by informants and realized in the natural language as declarative sentences. This methodology used both open-ended questions to construct the informants' propositions about the world and closed-ended questions to establish the interviewers' understanding of the response.

Teachers' beliefs about reading comprehension were assessed in two different ways. Teachers were asked about their notions of reading comprehension and how students learn to read in general, and then asked to identify and describe one of their problem readers, an excellent reader, and one below average. The first set of questions was designed to elicit their "declared" beliefs about reading comprehension propositions given by a person in public behavior and speech, cited in argument, or used to justify actions to others (Goodenough, 1971). The second set was designed to elicit more private beliefs by asking them to talk about specific students. It was felt that their private beliefs would come closer to their beliefs in action. We also asked the teachers about their own backgrounds, and their classrooms, schools and fellow teachers. The interview protocol is included in Appendix C.

The two principal investigators administered all of the interviews, which varied in length from 3/4 hour to two hours; but averaged around 1 hour. They practiced the interview technique together with two teachers and discussed each practice interview after it was concluded. The preparation for the interview phase was designed to help the interviewers agree on the significance and purpose of each of the major questions such that the probes for each question would lead in the same direction, and to reduce the potential for including leading questions. The interviews were taped and transcribed.

Using a constant comparative method (Glaser and Strauss, 1967), six randomly selected teachers' interviews were analyzed separately, with categories emerging for each of the six interviews. A common coding system was then developed (see Appendix C), and chunks of dialogue in each of the interviews were coded using the categories.

The categories of "Teaching Reading", "Reading", "Reading Comprehension", "Learning to Read", and "Questioning" were then examined in the interviews to develop a sense of each teacher's theoretical orientation to reading comprehension and the teaching of reading.

Results

In examining the teachers' comments about teaching reading and learning to read, it appeared that teachers could be placed along a dimension that moved from a 'word and skills' approach to a 'literature' approach. This dimension seemed to apply to both the teaching of reading and learning to read. In fact, beliefs about teaching and learning melded together in most of the interviews. At one end of the continuum was the notion that learning to read involved learning a set of skills, most of which revolved around recognizing and understanding the meaning of the word. Teaching, therefore, involved instructing the students and giving them practice in word attack skills, and working with them in vocabulary. At the other end of the continuum was the notion that one learned to read by reading, and the role of the teacher was to put students in contact with literature that would interest and motivate them to read.

Teachers could be arrayed easily along this continuum. For example, several teachers who were quite strongly literature-oriented, also stated that they used the basals for the stories and taught skills, but primarily because the district expected them to do so and students had to pass tests on the skills. However, they did not feel that the skills had much to do with learning to read. Such teachers were placed three-quarters of the way along the teaching/learning reading continuum, on the literature side. Likewise, some skills/word teachers had their students reading library books and perform in plays; however, these activities were meant to motivate the students, not to teach them reading. These teachers were placed a quarter of the way along this continuum on the skills/word side.

It became clear, also, that there was a second dimension, although it was more difficult to capture. This dimension is called 'Reading/Purpose of Reading'. This dimension reflects the teachers' definition of reading comprehension, and their sense of where meaning is contained. The two ends of the continuum are: 'Constructivist' (meaning is derived from an interaction between the student and the text) and 'The Meaning is

in the Text'. Most teachers did not differentiate between notions of what reading is and the purpose of reading. Thus, for most teachers, this continuum worked for both concepts. However, it was somewhat more difficult to array teachers along this dimension for two reasons. First, several teachers seemed quite schizophrenic in their dialogue: at one moment constructivist, such as when they were talking about literature and opinion questions; at the other, text-based when they discussed reading in the content areas. This indicates that they may have been, themselves, separating the two notions of reading and the purpose of reading. And the second problem seemed to be that some teachers did not reveal much about their beliefs along this dimension. This may mean that they don't really think about it much or that the wrong questions were asked in the interviews.

Each interview was analyzed using these two dimensions separately such that each teacher could be placed in one of four quadrants (see Table 5.1). The teachers are designated by a capital letter (indicating the school), and a small letter, indicating the teacher.

The Four Quadrants: One way to describe what the quadrants represent is to provide descriptions of teachers in each of them. Thus, the following descriptions are taken from the interviews, and use the language of the teachers as they described their understandings of reading comprehension, their goals for their students and their activities in class.

Quadrant 1: Fc is a fifth grade teacher in her ninth year of teaching. She remembers her cooperating teacher as being very structured and who "taught straight out of the book, just like me". When students enter her fifth grade classroom, they should have "word attack skills, they should be able to read, orally, at their grade level without stumbling, and should be able to transfer that reading into other subjects, and understand what they read. They should know the meaning of many words, and they should know how to write contractions". At the end of grade five, "they should have developed a larger vocabulary and be able to use that vocabulary in their oral and written work". She defined reading comprehension as "understanding what is read and being able to give it back".

Fc described her teaching of reading comprehension as following the book, and doing two stories a week. She grouped the students on the basis of their word attack skills, and feels quite inflexible about following her plans for reading. She feels frustrated by the District policy that does not allow her to move her good fifth grade readers into the sixth grade basal. She had a number of enrichment activities in the class, including a literature book once a week. She feels that this motivates the students to read; but she does not equate this activity with teaching reading. While she had taken a "Whole Language" course

recently, she did not feel that it had much to do with teaching reading.

Quadrant 2: Cb is a Grade 5 teacher in his third year of teaching. He teaches the whole group because he does not want to label students, and he feels that the good readers can model effective reading practices to the poorer students. The problems with the poorer students, he suggests, is that they focus too much on the word, and do not seem to be able to move ahead and understand the flow. He blames this, to a certain degree, on their not understanding the "connection between visual language and expression", possibly because they have not themselves read aloud enough, or been read to.

When Cb talks about what the students read, he focusses on the story, and whether it is interesting to the students. He views the learning of reading to be "magic" and, thus, teaching reading involves giving them interesting material: "giving them things that are challenging, interesting, fun, to give them success all at the same time. . .it's like reading readiness. I don't know, maybe I don't know a lot about it, but I think it's magic, you know, it just sort of happens and I think these kids are going to learn when they're ready and what's going to make them ready, I don't know." He states that he uses the basal around 60% of the time, in part because they mirror what will be on the achievement tests. He also structures his non-basal comprehension teaching around basal-like formats. For example, he wants them to learn about characterization, main idea, and understanding vocabulary within context.

He describes reading comprehension as "completely understanding the story". Whether it is a piece of fiction or biography, history or technical piece, "it's being able to know what is going on, who is doing it, be able to describe what they're about and, in general, sequence of what happens." He does, however, insist that the students provide the answers "in their own words. So I try to do a lot of processing of the information, so that it looks a little bit different, but it says the same thing". Thus, while Cd pushes the students toward internalizing what they read, he wants them to understand what is actually in the text.

Quadrant 3: Be has been teaching for 13 years, primarily in bilingual classrooms. The class, this year, is a nonbilingual fifth grade. When a student enters her fifth grade, Be hopes that s/he is able to "get some meaning from the printed page: something to relate to their past experience." Her goal in teaching reading is to get the students interested in books; in good books. She defines reading comprehension as: "It's a means of communication from the printed page to the child's experience. Deriving meaning from it. Understanding what the message is." She does not like to segregate reading and writing and feels that having students write books is an excellent way to involve them.

in reading.

Be uses the basal in groups. The groups are voluntarily formed every day. The students decide whether to read out loud or silently and ask many of the questions both during and after reading the story. She likes "What if. . ." questions and responses. Sometimes she asks the students to write the answers to questions and slips in a little skill teaching, for example, on punctuation. She judges whether or not she is behind in reading on the basis of what the students are selecting to read. "When I still have a child that is reading Skateboard magazine and nothing else, then I feel I'm behind."

Quadrant 4: Cc has been teaching for more years than she cares to remember, both on an Indian reservation and in border towns with large populations of hispanic students. For Cc, reading is being able to read out loud, although she later states that students who read orally are not necessarily understanding the passage. Reading comprehension is "being able to function, whether it be reading directions or reading a paragraph." She feels that it would be detrimental for kids not to have a structured, scope and sequence program.

Cc uses the basal and does a lot of "word meaning-type activities with work sheets. Word meaning is the most important thing for these kids." During and following the reading of a passage, most of her questions concern the meanings of words. Vocabulary is the most important skill on the worksheets. Her students do go to the library, but this is not viewed by Cc as teaching reading, but as a reward for finishing their work.

In Social Studies reading, Cc emphasizes questions that do not have a right or wrong answer. While she emphasizes the "right answers" on the worksheets, she is also aware that students have different views of what a word means. She understands this, because she has "worked with lots of minorities".

Relationship Between Teachers' Beliefs and Their Practices

By making predictions concerning certain elements of reading instruction from teachers' beliefs as elicited in the interviews, and examining the narrative and videotape observations, it was possible to conduct a relationship study: that is, determining whether we could predict practices from beliefs. The two analyses, predictions from the belief interviews and analyses of observations, were made by two different teams of two researchers.

Predictions from the Belief Interviews: Chunks of dialogue were coded in the belief interviews using Glaser and Strauss' (1967) constant comparative method to develop the coding categories. These coded chunks were sorted for this analysis into the

following categories: Learning to Read/Reading/Reading Comprehension, Teaching Reading, and Basals. Four types of statements in the belief interviews were used to develop each teacher's theoretical orientation and to make predictions about their classroom behaviors:

- o Empirical Premises:⁷ A claim that empirical evidence would establish as true or false. For example:

One factor that causes differences between good and poor readers is backgrounds, seeing parents reading a lot, being read to. Another is academic--being classified as non-readers. Its not that they can't read, its that they don't concentrate. (Ci)

- o Stipulative Premises: An analytic statement in which the meaning is stipulated. For example:

Reading comprehension is the ability to read and then be able to tell that you've read in your own words, to me, because you've read it, you've internalized it, and now you're able to say it back. (Ac)

- o Value Premises: A claim about what should or ought to be the case. For example:

I hope that by the time they're done in here that they've gotten used to reading about lots of different places, lots of different things, gotten turned on by some kinds of reading somehow. (Af)

- o Descriptions of Classroom Practices: Statements about how they teach reading in their classrooms. For example:

When we have reading groups and we read, I ask them to write the answers, give complete sentences to the questions in the book. (Ea)

Predictions of classroom practices were made on the basis of beliefs about reading, and statements that described their

⁷ The language used to describe these belief statements has been adapted from Green (1971) and Fenstermacher (1986) who suggest that practical arguments consisting of empirical, value and situational premises lead to actions. We have added a different type of premise--stipulative. In the reading field (and probably many fields in education), there are several different ways of defining and thinking about reading. Thus, these stipulative premises are important in a practical argument.

reading programs.⁸ The categories of predictions are depicted in Figure 5.1, and described below. The categories were addressed by analyses of interviews and observations/ videotapes.

1. Use of Basal Readers: Teachers' descriptive statements about how they taught reading and empirical premises that indicated the degree to which they viewed reading instruction as teaching a set of skills, or as bringing students into contact with literature or content they would enjoy, were used to predict use of the basal. If the teacher was designated as a basal reader user, we predicted whether s/he would adhere inflexibly or flexibly to it. For example, one teacher stated that she used the basal because "it was written by experts" who "know what skills are important". She was categorized as using the basal inflexibly. In contrast, a teacher who stated that she uses the basal with modifications by adding literature or that some of the skills in the basal are not related to reading, was categorized as using the basal flexibly.

2. Consideration of Student's Background Knowledge: This prediction concerned whether the teachers would activate and use their students' background knowledge strongly, or weakly if at all. These predictions were based on the teachers' descriptions of their reading programs, and also on their theoretical conceptions of the teacher's role in reading comprehension instruction and the location of meaning. We predicted that those teachers who operate from a transfer of knowledge framework (that is, knowledge is transferred from the text or teacher directly to the students) and also expressed the belief that meaning resides in the text, would use students' background knowledge in a weak manner or not at all.

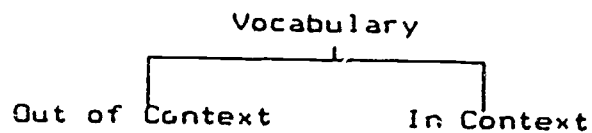
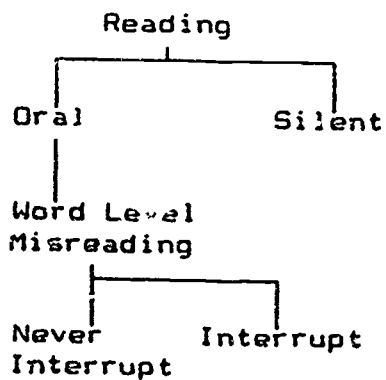
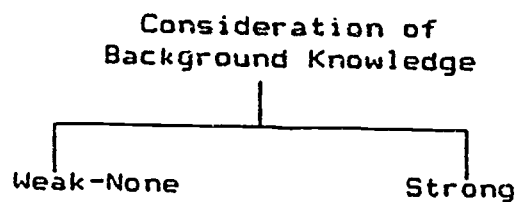
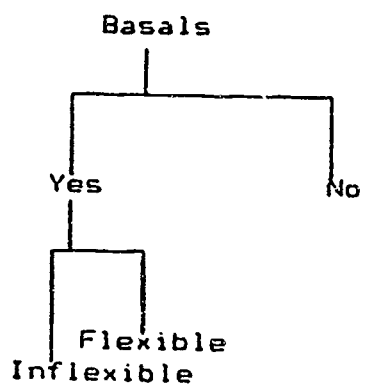
3. Oral Reading and Interruption of Students' Oral Reading: We used teachers' statements about their reading programs in combination with their view of reading to predict whether teachers ask students to read orally or silently. For example, a number of teachers defined good reading as being able to read out loud fluently and lawlessly with expression. There were also those who suggested that accurate word pronunciation is the first step toward understanding its meaning. Such teachers, we predicted, would interrupt students to correct for pronunciation.

4. The Teaching of Vocabulary: The predictions concerning the teaching of vocabulary focused on whether teachers would teach vocabulary in context or out of context. This was predicted partially on the basis of their descriptions of

⁸ For purposes of developing a sense of reliability, these two analyses were conducted separately. At the completion, the two researchers looked at both analyses, and resolved disagreements, of which there were only two.

Figure 5.1

READING PRACTICES CATEGORIES



practice, and also on the degree to which their theories of reading and teaching reading exhibited a word or decoding emphasis. Thus, when teachers stated a belief that reading comprehension starts from the meaning of the word and builds word-by-word, we predicted that they would generally begin a reading lesson by presenting students with a list of words which they would pronounce and look up in the dictionary or basal glossary.

The Relationship Substudy: Teachers received a 1, 2 or 0 in each of the categories for the interviews, narratives, and videotapes.⁹ A zero indicates that the activity was not observed at all (for example, a skills lesson in which students did not read a passage), or the category was not applicable for that teacher (for example, a teacher who asks students to read silently would not correct mispronunciation). Only those categories with a designation of 1 or 2 were used in this relationship study. The number of agreements between interview predictions and observations/videotapes were tallied in each category, and the percent of agreement was determined.

Predictions In Four Instructional Areas: Table 5.2 summarizes the data on the categories of reading practices by the source of the data. Column one shows the predictions from the interviews. The prediction was made, for example, that 32 teachers would use the basal. The next category suggests, however, that 22 of those would use the basal flexibly. It was predicted from the interview that very few teachers (9) would consider students' background knowledge. Given the numbers of teachers in Quadrant 1, this is not surprising. Predictions were made that 9 teachers would ask students to read silently, and 30, orally, and of those, 25 would interrupt when a student mispronounced a word. The last category summarizes the data on the whether teachers would teach vocabulary out of context (18) or in context (21).

Descriptions of Practice in Four Instructional Areas: Thorough descriptions of teachers' practices in these four areas are included in Chapter Four. A summary of the numbers of practices observed in the narrative and videotaped observations in these four areas are shown in Table 5 2.

1) Use of Basal: As indicated in column two of Table 5.6, 31 of the 38 teachers were observed to using basal readers during reading instruction. Twenty-one of those teachers were categorized as inflexible in their use, while ten were categorized as flexible. Ten of the 14 teachers videotaped used

⁹ For purposes of reliability, all four researchers conducting these analyses discussed, on a regular basis, the meaning of the different constructs to ensure that there was reliability across the four in terms of the meaning of the categories.

Table 5.2

NUMBERS OF TEACHERS CATEGORIZED BY READING PRACTICE

<u>Reading Practice</u>	<u>Interview</u>		<u>Observations</u>			
	<u>yes</u>	<u>no</u>	<u>Narratives</u>		<u>Videotape</u>	
			<u>yes</u>	<u>no</u>	<u>yes</u>	<u>no</u>
Uses Basal	32	7	31	7	10	4
Inflexible ¹	10	22	21	10	4	6
Consideration of Back. Knowledge ²	9	30	8	30	5	9
Oral Reading ³	30	9	26	4	9	3
Interruptions ⁴	25	4	15	11	9	-
Vocabulary: In Context ⁵	21	18	15	16	6	5

¹For those who used the basal, would or did they use it in an inflexible manner?

²Would or did they make extensive and authentic use of students' background knowledge, or very little if at all.

³Would or did they ask students to read passages orally or silently?

⁴Would or did they interrupt students when they mispronounced a word during oral reading?

⁵Would or did they teach vocabulary out of context of the reading passage, or in context?

Table 5.3

PERCENT AGREEMENT BETWEEN INTERVIEW AND NARRATIVE OBSERVATION AND INTERVIEW AND VIDEOTAPE

<u>Reading Practices</u> <u>Interview</u>	<u>Observations</u>			
	<u>Narratives</u>		<u>Videotape</u>	
	<u>Number</u>	<u>%</u>	<u>Number</u>	<u>%</u>
Use of Basals	34/38 ¹	89%	10/14	71%
Flexibility	19/29	66%	7/10	70%
Consideration of Back. Knowledge	31/38	81%	12/14	86%
Oral/Silent Reading	25/29	86%	12/13	92%
Interrupt/Oral	17/22	77%	9/10	90%
Vocabulary in Context	25/31	80%	8/11	73%

¹38 instances of both interview and observation on this category. 34 instances of agreement.

basals during reading instruction, four being inflexible and six flexible.

2) Consideration of Students' Background Knowledge: Eight of the 38 teachers were judged as considering students' background knowledge in their lesson presentations in the narratives. Five out of 14 teachers incorporated background knowledge in lessons that were videotaped.

3) Oral Reading: Of the thirty-eight teachers analyzed from classroom observations, twenty-six involved students in oral reading in association with first exposure to text¹⁰ (fifteen interrupting students during oral reading). Of the fourteen teachers videotaped, nine used oral reading as a first exposure practice. 4) Vocabulary: Thirty-one of the 38 teachers were observed teaching vocabulary. Fifteen taught vocabulary in context to the text to be read, while sixteen taught vocabulary out of context. Eleven teachers in the video tapes taught vocabulary, with six using instruction in context and five using instruction out of context.

Relationships: Table 5.3 summarizes the numbers of cases in which both interview and observation or interview and videotape could be compared, and the percentage of agreement. Percent of agreement in the six categories ranged from 66% to 92%. The least amount of agreement occurred in the flexible/inflexible use of basals category, with many more teachers indicating flexible use in their interview than was observed in their classrooms. This could have been a function of a certain amount of nervousness on the part of teachers upon being observed, or that teachers think about flexibility differently than the observers, or that teachers describe their practices differently than they enact them. The relationship between interview and observation in the category of Oral Interruptions could have been caused by the difficulty of determining interruptions in the narrative observational approach that focussed on teachers' practices. This would seem to be a valid explanation given the 90% agreement between the interviews and videotapes in which interruptions could, more easily, be observed.

Cases: Contradictions and Mismatches: In viewing the data in Table 5.3, it is clear that for most categories, practices could be accurately predicted from belief interviews. As mentioned above, two categories in which this is not the case is the degree of flexibility in using the basals, and the interruptions during oral reading in the interview/observation relationship. While the rest of the agreement percentages are quite high, there is,

¹⁰ Eight of the lessons in the narrative observations and two of the videotapes did not involve students reading text. These were primarily grammar lessons.

However, a question as to why agreement is not perfect. And this is where qualitative analysis is helpful.

One explanation for the mismatches that do occur could be attributed to those teachers who exhibited seeming contradictions in their belief interviews. These are instances in which an individual teacher's interview contains statements that would be placed on both sides of either the teaching of reading or the location of meaning continua, or both. These are called 'seeming' contradictions, since the analytic framework was developed by the researchers, and within an individual teacher's context framework, the statements may not be contradictory at all. An analysis of the seeming contradictions indicates that most of these contradictions may be explained by a more complex view of students and/or teaching. For example, a number of the seeming contradictions revolved around a different concept of the purpose of reading depending upon the subject matter.

Eighteen teachers exhibited contradictions on either the horizontal or vertical continua or both in the theory analysis. These teachers were also examined in terms of the accuracy of the predictions from their beliefs to their practices. These 18 teachers averaged two disagreements between beliefs and observed practices and accounted for 36 of the total number of 50 disagreements (see Table 5.2). This suggests that the seeming contradictions accounted, in part, for the mismatches between beliefs and practices.

In addition to the situation in which a teacher was placed at different points on one continuum, eight of the teachers in this analysis displayed contradictions on both continua. This placed them in opposite quadrants. In all cases, the two quadrants were I and III. In six of these cases, the answers to questions designed to elicit their general or public beliefs placed them in Quadrant III. However, when they described their beliefs-in-action, that is, what they do on a daily basis, their statements placed them in Quadrant I. One of these teachers (Af), in fact, did not seem to operate from a theory of reading, at all, when she described her classroom practices, but from a theory of helping students survive and figuring out what other people (such as teachers and test developers) want. Thus she was promoting skills related to strategies designed to get the right answers even if her students couldn't "read" the passage.

To provide a sense of how these seeming contradictory beliefs can be seen in the practices of the teachers, a case of Susan was developed, and is summarized below.

Susan had been teaching for 17 years in elementary schools. When we first talked with her, she was teaching a 4th-5th combination; the highest grade she had taught. Susan was enthusiastic about teaching and about her students. She

indicated in her interview that her students' parents supported her strongly, and that she felt free to try all sorts of different approaches as long as she took the time to explain to the parents what she was doing.

Susan was interviewed in the early Spring of 1988. In response to the general questions concerning reading comprehension, she expressed a quite constructivist view of reading comprehension:

The one thing I try to do more than anything else, in teaching reading, is find some experience that they have in their life to relate to the story. . . .I do that, purely because I've read the research that proves that's how children comprehend. If they can't relate anything to this story, I don't know if its going to have any meaning for them.

At the same time, she indicated that social studies is quite different from the stories. "Its hard to give social studies meaning", she complains. In social studies, there are "correct" answers, and these come directly out of the text.

Susan also stated that she recently realized that you don't have to rush through the basal and cover everything. In fact, she stated, that's no good for the children. She had attended a workshop that stressed cognition and the deep coverage of material. She feels freer this year, she stated, to slow down and do more literature. When she was asked to describe her reading program, however, Susan indicated a strong although flexible reliance on the basal. Further, she still seemed concerned about content coverage and "getting through the basal". In fact, she indicated that she is "rushing through it" so that the class can read four literature books at the end of the year. Thus, her interview indicated public or declared beliefs that would place her in Quadrant III, and private beliefs, or beliefs-in-action that placed her in Quadrant I.

The two Spring observations indicated that she relied heavily on the basal. The classes were organized in grade-level groups. Both lessons involved story comprehension with pre-vocabulary coverage, oral reading of text, and comprehension questions following the story. In one of the lessons, students were asked to work on some worksheets related to the concept of main character. What made the lessons flexible, however, were her discussions with the students about the story, in which she worked, considerably, with their background knowledge, including linking the story with others that they had read that year. In addition, in her vocabulary work, she stressed that the word meanings should be determined from their sentence context.

In the fall videotape, Susan began her lesson by telling students that they were going to read a ghost story in the basal, and that she was going to read a ghost story to them first. She showed them the pictures and asked them to make predictions, and then read the story orally. She then spent considerably time preparing students for the story in the text: activating background knowledge and feelings of being scared, working on some vocabulary words, and spending considerable time on the concept of figure of speech. She then asked the students to read the story in the basal, orally, with another student.

Susan's contradiction in the initial interview between her public statements about reading comprehension, and her beliefs-in-action as indicated in her descriptions of how she taught reading seemed to indicate that she was moving toward a more literature-based approach. She was already moving away from the notion that meaning is in the text and "correct" answers, except in social studies. While her spring observations revealed pretty standard basal lesson formats, her fall videotape was much less so. While her interest in literature was revealed in the discussion of the basal story in the Spring, the literature aspect of the reading lesson dominated the fall lesson. Thus, Susan's contradictions between her public statements about reading and her beliefs-in-action seemed to indicate that she was in the process of changing her beliefs and practices from Quadrant I to Quadrant III.

Conclusions

Teachers' beliefs and theoretical orientations toward a subject matter and the teaching of that subject matter have long been thought to affect their classroom practices. However, the mixed results in studies examining this topic have clouded our understanding of the relationship. This may be because the theoretical orientations were specified in advance of the study on the basis of reading programs and reading scholars' theoretical orientations.

In this analysis, teachers' theoretical orientations emerged from their own thoughts and language. With several exceptions, once the dimensions emerged, it was relatively easy to place teachers' orientations along both dimensions and, thus, in one of the four quadrants. While there is some overlap between theoretical orientations in the literature and those in the teachers' minds--particularly for Quadrants 1 and 3--the teachers' orientations were not as clear-cut as those in the literature. And in several cases, the teachers exhibited differences between their declared and operational beliefs. We can say the following about teachers' theoretical orientations:

- o In most cases, learning to read and teaching reading were melded together in the teachers' discussions, as

were reading and the purposes of reading.

- o A pragmatic rationale for using the basal and teaching skills was given for many of the Quadrant 2 and 3 teachers. That rationale was related to district policy.
- o While many of the teachers in Quadrant 1 presented reading experiences other than the basals to their students, they did consider these activities as incentives for finishing their work, or motivational, rather than part of their reading comprehension program.

Several interpretations of these findings come to mind. First, one could suggest that any apparent confusion in teachers' minds that was exhibited in the teachers' interviews is an accurate reflection of the field. That is, the lack of distinction between learning to read and teaching reading and the confusion between a descriptive model of the reading process and the various purposes of reading may be inherent in the implementation of some reading studies--if not their theoretical bases--and in publications and/or teacher education programs experienced by the teachers. A second interpretation is that these very complex distinctions have simply not been grasped by the teachers because they have not had enough teacher education in the teaching of reading comprehension. And a third interpretation is that teachers think about reading in ways very different from researchers and scholars, and that these ways of thinking are shaped by their experiences as teachers and are highly functional in the classroom.

This study also demonstrates that the beliefs of teachers in this sample, as assessed in an ethnographic belief interview, relate to their classroom practices in the teaching of reading comprehension. It further demonstrates the degree to which an examination of teachers' beliefs and practices can elucidate their instructional practices beyond observation-alone. The relatively strong relationship between teachers' stated beliefs about the reading process and their practices in classrooms allows us to give credence to the beliefs as stated, and therefore, to the way they were elicited.

Considerable effort, recently, has gone into disseminating research related to the learning and instruction of reading comprehension that suggests a more interactive approach to learning. This approach implies such practices as working with students' background knowledge, considering vocabulary within context and allowing students to read authentic literature. However, a majority of teachers within this sample neither held theories of reading that would accommodate these new ways of thinking about reading nor practiced them in their classrooms.

Their teaching was dominated by the basal, which, although used somewhat flexibly, still governed their thinking about the teaching of reading.

One can conclude, then, that genuine changes will come about when teachers think differently about what is going on in their classrooms, and are provided with the practices to match the different ways of thinking. The provision of practices without theory may lead to misimplementation or no implementation at all, unless teachers' beliefs are congruent with the theoretical assumptions of the practice. Further, programs in which theory is discussed and which focus on changing beliefs without proposing practices that embody those theories will lead to frustration. Staff development programs should weave three forms of knowledge together: teachers' background theories, beliefs and understandings of the teaching and reading process; theoretical frameworks and empirical premises as derived from current research; and alternative practices that instantiate both teachers' beliefs and research knowledge.

II. SCHOOL CONTEXT¹¹

Rationale and Review of the Literature

The original proposal for this project stated that "programs designed to change teaching of reading practices that ignore the context in which teachers operate may be doomed to failure" (Richardson-Koehler and Anders, 1986, p. 44). In support of this statement, the authors cited recent work on characteristics of effective schools (Bossert, 1985; Corcoran, 1985; Purkey and Smith, 1983) and of schools with strong norms of improvement and teacher reflection on teaching (Little, 1981; Little and Bird, 1983; Bird, 1984; Huberman and Miles, 1984; Rosenholtz, Bassler and Hoover-Dempsey, 1986). Educational researchers are beginning to gain an understanding of the conditions under which staff development is likely to succeed. They often conclude that the effects of staff development are dependent on much more than the quality of its program or content (Lieberman and Miller, 1984; Griffin and Barnes, 1986). In fact, Little has gone so far as to state that the school organization is not merely the "context" of staff development, but the "heart of the matter" (Little, 1981, p. 4). Therefore, we decided that an assessment of the organizational and cultural characteristics of the participating schools, in particular the school level "barriers" to adoption of research-based practices in reading, would be essential to an adequate interpretation of the results of the work with teachers in those schools. This report summarizes the findings for the

¹¹ This section is adapted from: Placier, P. (1989) School context and cases of schools: RIS Study. Tucson: College of Education, University of Arizona.

school level component of the study for Year 1 and early in Year 2.

Much of the work on barriers to change in teachers' practices has been based on an analysis of attempts to implement specific instructional innovations, what Fullan (1981) has called the "programmed perspective" on educational change. This project conformed more closely to what Fullan (1981) has called an "evolutionary perspective" on change. The staff developers were attempting to engage teachers in dialogue about and examination of their practices in light of research findings. Teachers were not obligated or pressured to change their practices in any specific ways, and the direction and extent of change depended largely on individual teacher commitment.

However, the staff development sessions occurred in the social context of the school, in a group format including several intermediate teachers who worked together every day, and with the cooperation and (at least minimal) support of school level administrators. That is, there was an expectation that individual commitment and change could take place under certain social conditions. Blase has argued that "'rational' orientations to school improvement, which focus on the attitudes and beliefs of individuals and small groups, or formal school structures, without attention to the politics of a given situation, may result in failure" (1987a:30). Others have pointed to the cultural conditions in schools which mediate against change (Sarason, 1971). In order to have some hope that the intervention would succeed with individual teachers, we had to rely on certain assumptions about the social, political and cultural contexts of the work:

1) Teachers in this school have the autonomy to change their practices in reading instruction. The teachers could not be constrained from changing their practices by forces beyond their control and beyond the influence of the staff developers. For example, teachers could not feel that research "is impossible to apply because of the constraints on them in their classroom, building and/or district" (Campbell and Lawrence, 1987). While some researchers have argued that schools are so "loosely coupled" that top-down control over teachers' classroom activities is next to impossible (Meyer & Rowan, 1978), many recent educational reforms have largely employed "power-coercive" strategies or "mandates" which limit teacher discretion in implementation (Gallagher, Goodvis and Pearson, 1988).

This is the political dimension of the context of our staff development. Teacher autonomy is a highly contested issue. For instance, teachers may have little say in the selection of reading textbooks which drive their reading curriculum or of standardized tests which embody a particular view of reading and are used to evaluate their instruction (Shannon, 1989). As

pressure for accountability and higher student achievement is applied to school systems, administrators may place more pressure on teachers to tie their instruction directly to district and/or state criteria or to achievement tests (Apple and Teitelbaum, 1985; Fraatz, 1987; Frymier, 1987; Corcoran, Kohli and White, 1988).

In their discussions of implementation of changes in reading programs, Meyer (1988) and Carnine (1988) both argue for more deliberate, directive top-down strategies which overcome "loose coupling" and other sources of teacher discretion and resistance to change in schools. Murphy (1988) has recently claimed that in more "effective" school districts there are more clearcut district expectations and greater district control over the technical core of instruction. In such districts there may be a higher consensus about "what works," and perhaps less teacher discretion to tamper with success.

At the school level, the politics of teacher-principal relationships may vary in ways that limit teacher control over their practices. For example, some principals nurture teacher autonomy, or at least leave teachers alone, while others may intervene in classrooms to promote their own educational preferences or to enforce district mandates (Leithwood and Montgomery, 1982; Bifano, 1988). Where a powerful administrator does not support teacher innovation, staff development efforts such as ours might be futile. On the other hand, Hallinger and Murphy (1985) argue that in "effective" schools, principals often exercise more bureaucratic control over teaching, by monitoring the instructional program more closely and aiming for greater coordination among classrooms and grades. The tradeoffs for teachers under these conditions of decreased autonomy are more frequent interaction, incentives and recognition, and a reduction in uncertainty. That is, teachers in some systems or schools may feel more constrained in their reading practices, but also more positive, if they believe that what they are doing works and they are being rewarded for it.

Teacher autonomy may mean that teachers are more receptive to staff development efforts which they perceive as noncoercive and voluntary, rather than district- or principal-imposed (Smylie, 1988). On the other hand, principal and district support for staff development might facilitate teacher involvement in some schools. Thus, staff developers must be careful about how they present their relationship to the district and school administration, depending on the political scene.

Teacher autonomy has a negative side which can clearly become one of the primary barriers to innovation: teacher isolation and alienation (Little, 1981; Schwille and Melnick, 1987). In another twist, Whiteside (1978) has argued that autonomous, innovative teachers may commit themselves strongly to a particular

instructional direction, and become resistant to change efforts which are inconsistent with these previous commitments. To further complicate matters, Blase (1987b) has argued that teachers can be negative toward other teachers who stay to themselves and do not participate in mutually-supportive activities. In his study, teacher "collegiality" of this sort carried with it pressure on individuals to conform with the views of the majority -- and may have worked against innovation. As Little (1987) puts it, "An emphasis on cooperation may place a premium on coherence and uniformity at the expense of individual inventiveness and independent initiative" (p. 513).

In short, teacher autonomy as a condition for changes in teacher practices has very complex and controversial implications.

2) Teachers in this school are working under conditions that are not so stressful that they inhibit teacher motivation and performance in the classroom. Studies of teacher stress (Blase, 1986; Bacharach, Bauer and Conley, 1986) suggest that in some schools teachers are under so much stress that an additional demand on their time, no matter how valuable and well-intentioned, will be perceived as an additional source of stress. Blase (1986) identified characteristics of the organization, student population, and administration of schools as contributing toward teacher stress, with lack of time being by far the most frequently-mentioned source. Bacharach et al. (1986) identified negative supervisory behavior, discouragement about student learning, and role ambiguity as predictors of stress among elementary school teachers. Teachers tend to lower their expectations for their performance and for student achievement under such conditions (Blase, 1986); they may also lower their expectations for staff development. Sessions become opportunities to escape from work-related stress. Teachers under stress do not want staff development to complicate their worklives, escalate school conflicts, or make their instructional choices seem problematic.

Teacher "assistance" to staff development is often viewed as "irrational," from the staff developers' point of view. However, negative reactions to a proposed innovation may be linked to some already-existing concerns within the organization or group unknown to the staff developers (Firestone and Herriott, 1981). From a cultural point of view, teachers view their worklives as complex, delicately balanced wholes into which specific innovations must fit without causing additional strain (Blase, 1987c). As one teacher has put it: "The world in which we work is a maze of interrelated problems and pressures that cannot be pulled apart" (Campbell and Lawrence, 1987:12).

This dimension of the context of staff development underscores the importance of understanding the history of staff and teacher-student relationships at the school, physical conditions and

resources which limit or enhance teachers' work, and teachers' usual duties and schedules (Lieberman and Miller, 1984; Corcoran et al, 1988). Successful staff development must be perceived as a positive opportunity, not an additional burden or complication.

3) If a teacher at this school has both the discretion and the motivation to change his/her practices, the school culture will support these changes. There may be other limitations on the effects of staff development which derive from cultural norms within the school. Deal (1984) characterizes culture as the "less rational" and "expressive" side of schools. People in schools hold certain core values and meanings in common. Change disrupts this cultural system and is often felt as a loss of consensus and meaning that can be threatening and disorienting. Core values which might influence teacher receptivity to instructional changes are commitment to improvement and a sense of efficacy, on the positive side, and isolation and individualism, on the negative side (Schwille and Melnick, 1987). King (1983) holds that people in a school also share an image of "the student" (positive or negative) which drives their instructional approaches.

Purkey and Smith state that an "academically effective school is distinguished by its culture: a structure, process and climate of values and norms that emphasize successful teaching and learning" (1983:442). A great deal of work has gone into identifying the cultural aspects of "effective schools," which are usually labelled "school climate." Rosenholtz et al. (1986) have named principal collegiality, principal evaluation practices, instructional coordination, goal-setting, teacher collaboration, and management of student behavior as key aspects of the school climate which correlate with teachers' receptivity to innovation. In another study, teachers identified a "positive climate" of confidence, trust, security, collegiality, and positive, nonthreatening teacher-principal relationships as factors which foster their professional growth (Schwille and Melnick, 1987). It is notable that the quality of teacher-principal relationships emerges in these studies as crucial to what Barth (1986) has called the "ethos of the workplace" (p. 472). Principals who give teachers genuine power and recognition reverse the institutional trend toward de-professionalization (Barth, 1986). Where these cultural conditions are missing, staff development efforts which depend on teacher "professionalism" may be less likely to succeed.

Deal's characterization of culture as "less rational" relates to another of change in schools. This has to do with the researchers' or staff developers' image of the organization in which they are intervening. If they believe that the organization (actually, the actors in it) operates rationally and bureaucratically, they may enter the field with certain predictions about how their efforts will proceed -- predictions

which may be disappointed. If they are aware of the political and cultural aspects of school organizations, they will be more cautious about making assumptions about the ease with which their message and approach will be received (Firestone and Herriott, 1981), and will attend carefully to existing norms and to the naturally "discombobulating" nature of change (Lieberman and Miller, 1984; Deal, 1984; Griffin and Barnes, 1986).

Another aspect of the political and cultural nature of the school context of staff development has to do with the relationship between universities and schools, mirrored in beliefs about research and practice. The school level researcher for this study felt it important to probe principals about their views on this issue, and found variation in their responses. Principals who express negative or skeptical opinions about academics and/or research, or teachers who share a dissatisfaction with their preservice training in the university, may help to create a school climate which is less receptive to university-sponsored staff development. Griffin and Barnes (1986) found that in a district and school which already had strong norms of employing research to improve academic performance, teachers and administrators were quite receptive to a research-based staff development related directly to everyday classroom practices and to the school's existing plan of improvement. The cultural distance between researchers and practitioners can be bridged under such conditions.

4) If all of the above conditions are met, teachers at this school take advantage of them by working together to make improvements in instruction and excitement about teaching a group norm. According to Little (1981, 1987), the optimum (but rare) environment for staff development is a school in which teachers as a group, with support of school leadership, already interact frequently about instruction. They have overcome teacher isolation and individualism, and both communicate often about what goes on in their classrooms and collaborate actively in their work. They have established analysis and evaluation of practice as a group norm, and this norm promotes and sustains change (Little, 1981, 1987). They, along with their school principal, have established a "climate where the expectation for change is the norm rather than the exception" (Gallagher, Goodvis and Pearson, 1988). This climate is not something that staff developers can create; it is the product of time spent working together, deliberate effort and support, and perhaps interpersonal compatibility.

Both the school level questionnaire and the qualitative case studies developed for this study were designed to inform the staff developers about whether these assumptions about school and teachers were warranted in an individual school, and how the schools compared along these dimensions. The following section discusses how we went about this investigation.

Data Sources

The data sources for this report are:

1. Results of a school level questionnaire administered in the six participating schools in spring of Year 1 (See Appendix C for a copy of the questionnaire).
2. Observations of school characteristics by classroom observers who visited the schools 10-20 times for their observations of teachers, and for several additional hours during their administration of reading tests at the beginning of year 2.
3. Audiotaped and transcribed interviews with principals, curriculum specialists, and the classroom observers and excerpts from teacher belief interviews which touched on their descriptions and opinions of their schools. All of these interviews were collected during Year 1. (See Appendix C for principal interview protocol.)
4. Observations of meetings and other interactions with staff at each school, recorded as fieldnotes during Year 1 and early in Year 2.
5. A School Fact Sheet completed by each principal in the spring of Year 1, indicating basic demographic and organizational information about each school (See Appendix C).

The quantitative questionnaire data and the qualitative case studies for each school are presented separately in the following two sections, and then integrated in the Conclusions.

School-Level Questionnaire

Questionnaire Development and Procedures: The questionnaire on school climate and organization developed for the study was constructed by combining scales from three questionnaires previously employed in large survey studies of teachers (Bacharach, Bauer & Snedd, 1986; Rosenholtz, Bassler & Hoover-Dempsey, 1986; Smylie, 1988), with the consultation of Dr. Sharon Conley. In addition, new items were developed which more specifically addressed this study's purposes. Appendix C lists the scales, their sources, and the Cronbach's alphas calculated for our sample of 88 teachers. On advice of our consultant, we selected only certain items from Rosenholtz's scale labeled "skill acquisition," a variable of high interest for a staff development project. Unfortunately, alphas for this partial scale were so low that results cannot be reported, either because of our small sample size (in comparison with most survey research) or because our tampering with the scale destroyed its

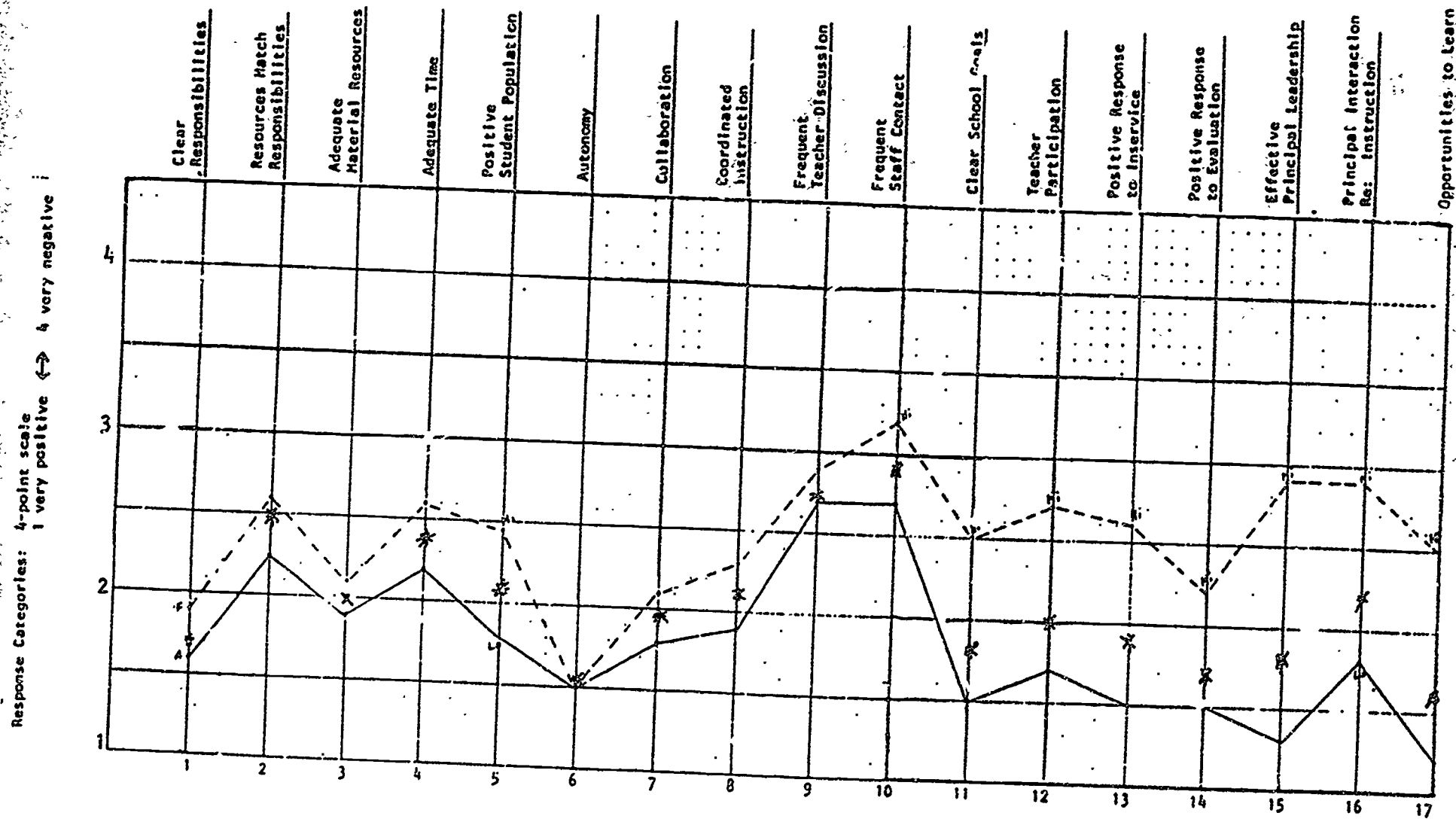
internal coherence.

The intention in administering the questionnaire was not to test hypotheses about relationships among school-level variables, as in most survey research, but to develop a descriptive profile of each school on variables previously shown or argued to be related to positive responses to staff development or to teacher innovativeness. There were no predictions about the exact relationship between the questionnaire variables and the outcomes of the study. Schools A and F were selected as experimental schools (and B and D as control schools) long before the questionnaire data were collected and analyzed. Therefore, the study was not designed to "match" schools or to compare them in simplistic ways (e.g., by classifying them as "high" or "low" on particular scales). Rather, the results informed the researchers about the kind of school climate in which they would be conducting their staff development, from the point of view of the teachers. The researchers were able to compare quantitative data from the teacher questionnaire with qualitative data about the school from interviews and observations, to develop a coherent picture of each school. They could ask themselves throughout the staff development process, "Does this data help us understand the responses we are seeing among the teachers at this school?" In the end, the questionnaire results were useful in constructing a contextualized interpretation of the results of the staff development intervention.

The questionnaire was distributed to all teachers in all six schools during April and May of Year 1 of the study. The school level researcher met with each group of teachers to explain the questionnaire's purposes and to address any teacher concerns, especially since some items referred to teacher opinions of the principal, confidentiality was assured. Questionnaires were identified only by a school code. Questionnaire returns were coordinated by school staff, and as a consequence return rates varied among schools. For the total sample, 85 of approximately 120 teachers (73%) returned their questionnaires.

Questionnaire Results: Descriptive statistics were calculated for the total sample as well as for each school, on an item by item basis and by scales. Means for each school by scale were plotted (see Figures 5.2 and 5.3), pairing the two experimental schools (A and F) and the two control schools (B and D). Means for the third experimental school, School C, were not plotted; a low percentage of questionnaire returns and high staff turnover between years 1 and 2 made this data questionable in validity (see School C case study for an explanation of these circumstances). However, data from School C teachers, as well as teachers from our pilot school (School E) are included in the total sample.

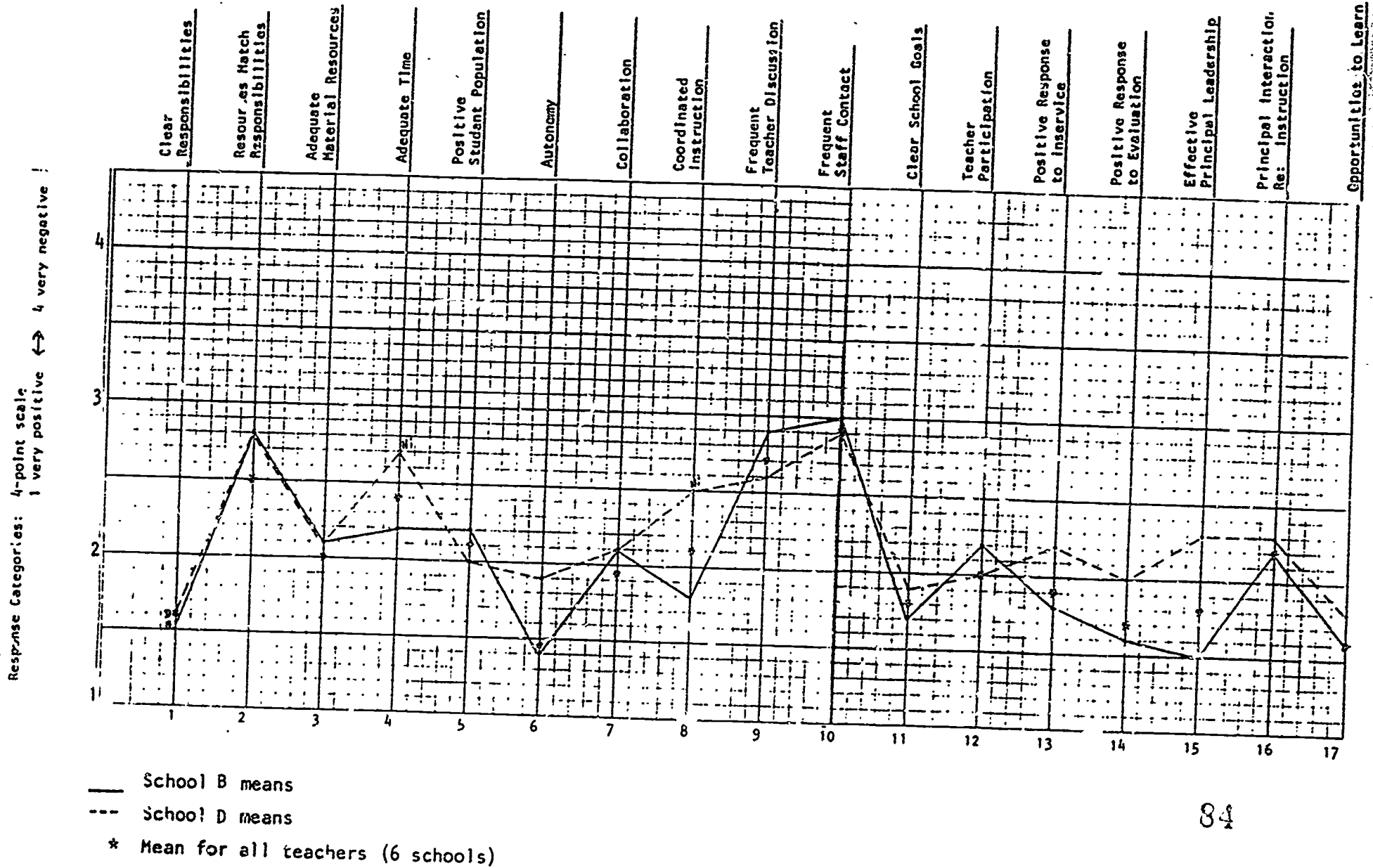
Figure 5.2
SCHOOLS A & F : SURVEY RESULTS



— School A means
 - - - School F means
 * Mean for all teachers (6 schools)

Figure 5:3

SCHOOLS B & D : SURVEY RESULTS



Interpretation of Figures 5.2 and 5.3 depends on an understanding of how the items and responses on the questionnaire were worded. On a four point scale 1 was the most positive response, while 4 was most negative. Therefore, the peaks on the graph actually represent negative views of the school in relation to a particular variable. The profiles show that on variables 1-6, the description of the conditions under which teachers work, all schools appear relatively similar; that is, teachers in all schools described the basic conditions of their work similarly. Of most interest are the positive responses to the "autonomy" scale, which describes conditions of discretion and control over one's work. On scale #1, "role ambiguity," teachers also reported a high degree of certainty about their job responsibilities. However, there were peaks for conflict between resources and responsibilities (#2) and adequate time (#3). Schools A and F were at the extremes for views of their student populations, School A teachers being most positive and School F teachers being most negative.

Items for scales 7-16 asked about the social/organizational environments in which teachers worked, in particular about conditions which Rosenholtz et al. (1986) had found to be related to teacher learning or which Little (1981) had tied to positive responses to staff development. While teachers reported somewhat positively on their degree of collaboration, this seemed in tension with their negative responses on measures of "isolation," the frequency of staff contact and discussion. On other variables -- school goals, teacher participation, etc. -- the schools began to diverge, particularly Schools A and F. School F teachers had the most negative responses on virtually all of these scales. The control schools, B and D, were in general less different than the experimental schools on these variables.

Number 17 shows the means of responses to a single item from Rosenholtz's skill acquisition scale: "At this school, I have many opportunities to learn new things." While a single item is an inadequate measure, responses to it seem to bear out the same relationships which Rosenholtz found, between positive social characteristics of schools and teacher orientations toward learning.

Questionnaire Interpretations: The two experimental schools (A and F) presented contrasting contexts in which to conduct staff development. While teachers in both schools reported similar basic working conditions, the schools diverged on variables which have been argued to be descriptive of an optimal environment for teacher learning and change.

In both schools, teachers reported a high degree of autonomy; however, autonomy is only the minimal condition for teacher innovation. In both schools, teachers also reported that they were isolated from frequent contact with others. This is the

"down side" of teacher autonomy. Neither school appeared to be an optimal environment for staff development, one in which teachers have overcome isolation and talk with each other openly and often about teaching (Little, 1981).

Where the schools differed most was in teacher assessments of the clarity of school goals, their participation in decision-making and in-servicing, and their assessments of their principals (fairness and clearness of evaluation, positive leadership, and interaction regarding instruction). It might be said that School F teachers appeared to be more disempowered concerning their control over school goals and decisions, and teacher-principal relationships within their school. The differences in teacher views of students, while not extreme, may also hold some clues. Barr (1985) has suggested that teachers adapt their reading instruction in response to student ability. Perceptions of student ability may limit teachers' visions of the possibilities of reading instruction, and constrain their responses to staff development promoting innovation in this area. However, School F teacher complaints about students seemed to focus more on misbehavior than on low ability, and their students scored much higher than those at School A on the reading section of the Iowa Test of Basic Skills.

Qualitative Case Studies

Case Study Procedures: A school level file was created for each school, which contained principal and classroom observer interviews, excerpts from teacher interviews, field notes from the school level researcher and the classroom observers, the School Fact Sheet, and records of any incidents or communications with the school which were reported to the school level researcher. The school level researcher provided the classroom observers with directions for conducting and recording their observations (See Appendix C). Where observers varied in the extent of their observations, the school level researcher filled in the details through a recorded debriefing interview.

At the end of Year 1 of the study, beginning with the three experimental schools, data were coded according to categories which were both consistent with the data and, in many cases, congruent with categories shown to be important in previous work on school climate and organization. (See Appendix C for coding categories.) Narrative case studies were written from analysis of the coded data.

First drafts of the case studies were distributed to the classroom observers and principal investigators for comments and editing. Final drafts incorporated additional data from early in Year 2, from principal and teacher contacts concerning planning for Year 2 activities and from observations of classroom contexts during the administration of reading tests. Case studies for

each school (excluding the pilot school, School E) are included in Appendix E.

Conclusions

The results of the School Context study indicate that the schools differ considerably on a number of factors thought important for school change. It should be noted, however, that the research on which the questionnaire and predictions was based viewed teacher change as an imposition or mandate from someone or group external to the classroom. In this externally-mandated type of change process, the staff development process is usually top-down, which does not provide teachers with access to their own beliefs and understandings, nor with decision-making power to determine the content of the process. The Staff Development process in this study was designed as a bottom-up constructivist process; and the only limit on the nature of the content was that it would be reading comprehension, broadly defined. Thus, in addition to the technical problems of low sample size, predictions of the success of the staff development process in the various schools could be faulty. The effect of the context on the staff development process will be examined in Chapter Six.

CHAPTER SIX

THE STAFF DEVELOPMENT PROCESS AND ITS EFFECTS

I. INTRODUCTION¹²

The fourth question asked whether a staff development program that is based on notions of practical arguments would affect teachers' beliefs and practices. A subsidiary question related to whether the context of the school would affect the staff development process and outcomes.

These questions will be addressed in this chapter in the following manner. First, the staff development process in two contrasting schools will be thoroughly described. Second, the relationship between school context and the staff development process will be explored. And third, the effects of the staff development process on teachers' beliefs, and perceived and observed changes in the instruction of reading comprehension will be addressed.

II. DESCRIPTION OF STAFF DEVELOPMENT

Rationale and Theoretical Framework

Recent research on changes in teachers' practices (for example, Hollingsworth, 1990; Munby, 1983, Russell & Johnson, 1987) suggest that theories should be accounted for when research-based practices are presented to teachers--both the theories related to the practices in the literature, and the teachers' own theories. Additional research suggests that the school context should also be considered in conducting a staff development program (Griffin, 1983; Little and Bird, 1983, Rosenholtz, Basler & Dempsey, 1986). Thus the staff development process planned for in this program contained the following aspects: individual and group level work; and discussions of practices embedded in participants' and research-based knowledge and theory.

The theoretical framework that guided the development of the staff development process was Fenstermacher's (1986) concept of

¹² This chapter is taken in part from: Hamilton, M.L. (1990). The practical argument staff development process, school culture and their effects on teachers' beliefs and classroom practice. Unpublished dissertation; Richardson, V. & Anders, P. (1990). The role of theory in descriptions of classroom practices, Paper presented at AERA, Boston; and Richardson-Koehler, V. & Fenstermacher, G (1988). The use of practical arguments in staff development. Paper presented at the annual meeting of the AACTE, New Orleans.

practical arguments. The original notion of practical arguments is found in Aristotle's work and suggests that a practical argument consists of a set of premises that lead to an action. This was adapted in recent times for educational purposes by Tom Green (1976) who argued that the purpose of teaching is "to change the truth value of the premises of the practical argument in the mind of the child, or to complete or modify those premises or to introduce an altogether new premise into the practical argument in the mind of the child" (p. 252). Fenstermacher (1979) modified this further to suggest that the value of research on teaching is to change or modify the premises in the minds of teachers, and thus their actions. Fenstermacher suggested that research could be introduced to teachers by encouraging them to examine their own empirical and value premises in relation to those extracted from current research. Such a process, he hypothesized, would allow teachers to alter the truth value of their premises.

The goal of the staff development process was to develop an environment that would allow teachers to examine the explanations for their practices in relation to empirical premises and practices drawn from current research. Explanations for a particular practice consist of a set of statements of beliefs about teaching and learning that may be placed within the analytic framework of a practical argument. A practical argument is a set of empirical, value, situational, and stipulative premises that end in an action. It was thought that when a teacher reveals an empirical premise, it could be discussed in terms of alternative empirical premises as derived from other teachers or from recent research on reading comprehension. In this process, the teacher may alter premises and/or adopt new ones, and thus reconsider and change classroom practices.

The design of the staff development program accommodated both individual teachers and groups of teachers in each school. In addition, for each school a graduate student was available for modelling practices in classrooms, observing and providing feedback to teachers. The description below focuses on the processes in two schools, A and F. These two schools were selected because they contrasted quite strongly in the context study (see Chapter Five).

The Participants and the Logistics

All grades 4, 5 and 6 teachers in both schools participated in the staff development. In addition, an LD teacher in each school was involved, and in School F, the curriculum specialist attended the sessions. The School A principal attended from time to time. In school A, the six teachers consisted of 3 females and 3 males. All five teachers and the curriculum coordinator in school F were female. The years of experience ranged from 1 to 16 in School A, and from 8 to 32 in School F.

There were two primary staff developers, one with an expertise in reading comprehension, and one in teaching and teacher education. In addition, four graduate students were involved in the process, and contributed from time to time as staff developers.

The teachers volunteered for the staff development and were asked to make a number of decisions concerning the process, namely, when and where the sessions would be held and the length of each session. The staff development sessions were conducted three times per month in School A (a total of 11 sessions) for two hours each, and were held after school in the school library. In School F, the staff development sessions were held one afternoon a month (a total of eight sessions) in the home of one of the staff developers. In School A, the teachers were offered either three credit hours of graduate work or the equivalent funds to participate. In School F, the teachers opted for the funds to pay for substitute teachers.

Individual Sessions

A practical argument is a heuristic device used to assist teachers in examining their beliefs which consist of four types of premises: value, empirical, situational and stipulative. These arguments represent an intention for action. Importantly, teachers do not consciously think in practical arguments (Fenstermacher, 1987; Richardson and Fenstermacher, 1988). A second person is required to listen to the teacher, talk with him/her and help lay out the argument. In this form of staff development process, a videotaped lesson from each teacher's classroom was used to solicit information from the teacher about what they do in their classroom. The listener asks questions which helps the teachers tease information and ideas out that, until that time, possibly had been tacit. The listener also suggests alternative premises and practices that the teacher may wish to consider and use in the classroom. The session closes with the teacher agreeing to try a number of practices with which s/he would receive help from the staff developers.

In this staff development process, the individual component varied from participant to participant and school to school. Although the topic of videotaping was chosen by the staff developers from the observations made the previous years, the way in which the teachers chose to represent that topic was their own choice. For example, when a lesson that included work on reading comprehension, not skills, was requested, one teacher, nevertheless, presented skills. The teachers' interpretations of the staff developers' requests, as well as the lessons that were videotaped, became substance for the individual sessions.

Prior to the individual sessions, the staff developers previewed the videotaped session to prepare and pinpoint certain segments on which they wanted to focus. These segments provided the staff

developers with an entre into a discussion with the teachers about their tape.

The staff developers intended the sessions to be as informal as possible. To that end, they arranged for them to occur at the convenience of the teachers, before, during, or after school. Further, prior to the session, the teachers were asked to view the videotapes by themselves, although they sometimes did not do so. This helped eliminate concerns that might arise from their appearance and/or their students' behaviors. The sessions themselves took place in the teacher's classroom, if before or after school, or in a meeting room if during school.

The staff developers had not established a prescribed way to undertake the individual component, however, a certain format was usually followed. Initially, either SD1 or SD2 described the purpose of the meeting, which was to discuss the tapes in some detail, exploring what was done and why, with the hope of establishing areas the teachers wanted to improve. The project operated on the notion that teachers wanted to be the best teachers they could possibly be and, therefore, were looking for improvement strategies.

It was explained to the teacher that s/he or the staff developers could stop the tape whenever they wanted to discuss what occurred. The videotape was shown, and the actions were discussed. In particular, the teacher was often asked to describe her/his rationale for her/his instruction and to respond to questions about classroom actions. This discussion provided practical arguments for his/her actions in teaching reading comprehension. The staff developers would interject alternative premises and practices into the discussion. Each session culminated with the teacher identifying areas of practice that s/h would consider in terms of both understanding and implementation in the classroom. The graduate student assigned to the school provided follow-up in the form of suggested alternative practices.

This process was conducted at the beginning of the staff development process, and at the end. All sessions were audiotaped, and these were transcribed. A short description of a practical argument sessions are included in Appendix D.

Group Sessions

Goals: The group level process was designed as a constructivist activity in which the content or curriculum consisted of teachers' cognitions and beliefs about their practices, and current research on reading comprehension. The purpose was to provide an environment in which a group of teachers could explore these together. Little in the staff development literature, however, provided guidance for the type of group process we

envisioned. We wished to create a process that was neither top-down nor bottom-up, but allowed for the introduction of a specific knowledge and ways of thinking that were "new" to at least some of the participants.

We were drawn to Duckworth and Bamberger's (Duckworth, 1986 & 1988) work with teachers in the Cambridge area which involved a group of teachers in pursuing a scientific problem over a period of time in an attempt to provide an environment conducive to the teacher participants development of personal theories concerning the phenomena they were studying. A second approach was the IR&DT process (Griffin, Ward & Tikinoff, 1981) in which teachers in a school, with the guidance of a researcher/consultant, conducted action research around a problem of concern to them. Also intriguing was the critical reflection or emancipatory action research process at Deakin University, Australia, and described by Kemmis (1987). In this program, a community of practitioners met to examine "their own practices, understandings and situations which becomes the subject and object of critical reflection; and systematically changing their own practice is one of the primary means by which they act to change the situations in which they work" (p. 77). We were very interested in an empowering, democratic staff development process; however, the staff developers had a specialized knowledge, current research on reading comprehension, and a conscious intention to inject that knowledge into the conversation. We were concerned that this intention would make the bottom-up processes to which we aspired in this program difficult if not impossible to implement, at least initially.

Perhaps the closest program to the one we envisioned was Elliot's (1976-77) action research project that took place in East Anqlia, since the topic of discussion, the inquiry/discovery approaches in classrooms, was predetermined. The hypotheses derived from this action research project related, however, to the types of teachers and schools who would most benefit from the process, rather than a thorough description of the process itself.

The Process: The group component involved group meetings with all intermediate grade teachers in the designated schools. In these meetings teachers talked about the practices they implemented during reading comprehension instruction and reflected, in a group setting, on these practices. The staff developers served a catalysts for these discussions, and also as models for reflection. Furthermore, they provided the knowledge base that teachers used for both reflection and implementation, such as knowledge about theories of reading comprehension, and examples of practices that were supported by those theories.

The group component had a more traditional staff development atmosphere, which included sitting in circles, focused discussions, and agendas based on topics that the teachers

identified as important to them. The teachers' responses became a group practical argument of sorts and a chance for the teachers as a group to explore change in their classrooms.

An ethnography of the process by M.L. Hamilton (1989) produced the following description:

The staff developers obviously brought their own beliefs and personal theories into the staff development process. Having designed the Project, they had ideas and plans for the staff development program and directions for the practices they employed in that staff development. Doubtless the biases and beliefs of the staff developers affected their entry into the project, but importantly, these biases and beliefs did not appear to greatly affect the directions and topics that the teachers chose to focus upon in the staff development programs, which was one of their intentions for the process.

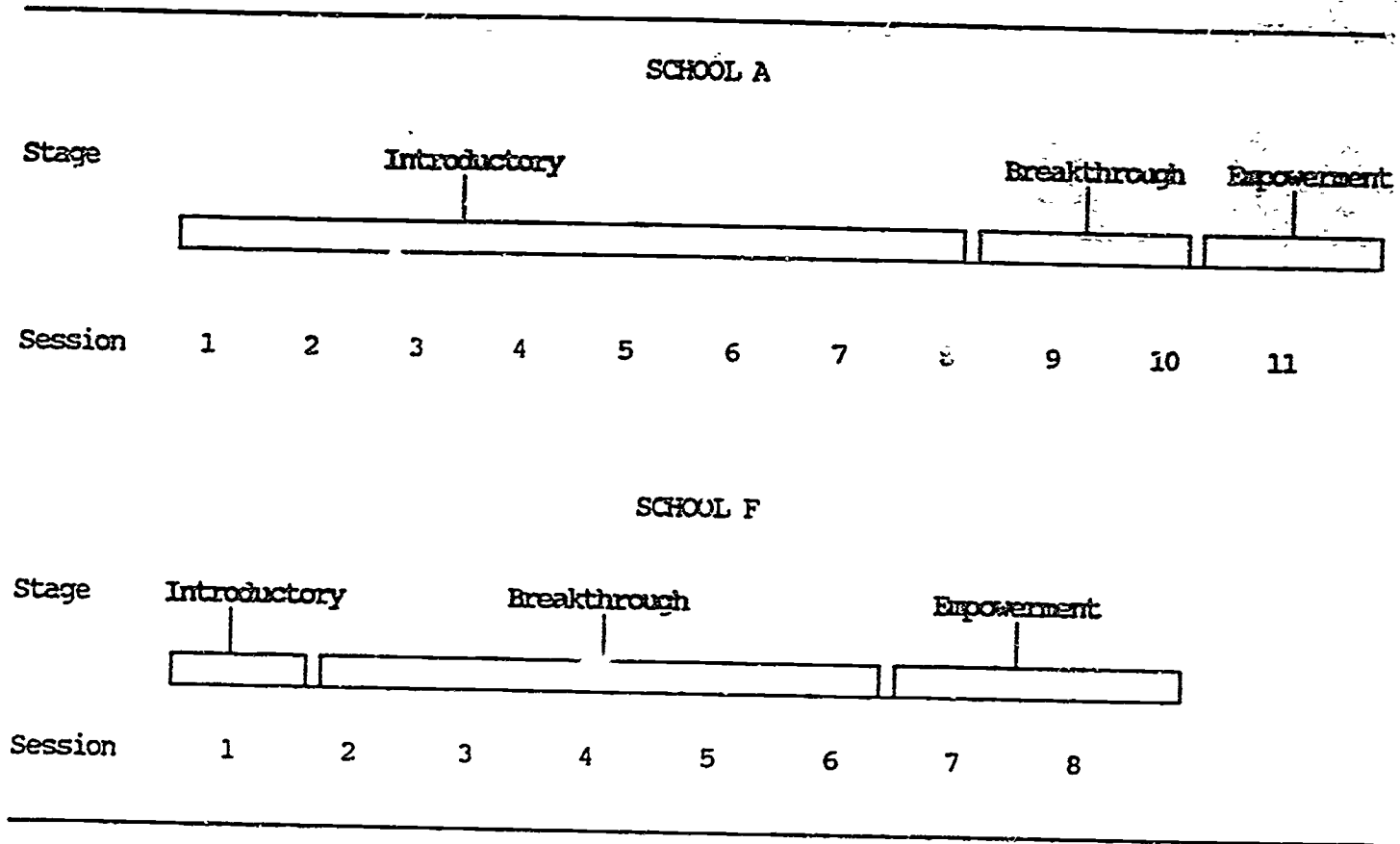
As the staff development programs progressed, the staff developers seemed less inclined to talk about their ideas and more inclined to ask, "Well, what do you think?" even as the teachers pleaded for information about the "right way" to teach reading. Of course, their beliefs were apparent and acknowledged, but they did not attempt to sell the teachers on their ideas. Rather, they took great efforts to listen carefully to what the teachers said. Moreover, they brought in and examined topics of concern expressed by the teachers, and veered away from discussions about their own beliefs.

School A, for example, always wanted to know about the "right way to teach reading", and several teachers at various times asked SD1 and SD2 to expound upon that. Sometimes the teachers would be quite adamant. In response, the staff developers would always emphasize that there were many ways to teach reading, and that they were not promoting any one particular theoretical perspective. In session six of School A's staff development process, for example, SD2 said that the important point about this staff development was that it was "not a staff development program that comes in with all this stuff packaged" for teachers because they "don't care to present any of this unless there is a question about it. We are responding to the questions that you have".

The staff development component of the RIS project had a specific focus on the exploration of change, that is, the change of teachers' practices in reading comprehension, but not a specific program. In other words, there is no formula that could be quickly described and undertaken. (pp. 198-200).

Each session was videotaped, which afforded us the opportunity to analyze the process and discourse to determine patterns and the

Figure 6.1
 STAGES OF STAFF DEVELOPMENT: SCHOOLS A & F



nature of the conversation around theory and practice.

Three Stages: The group staff development program appeared to follow certain stages, each stage taking different lengths of time in the two schools. Initially, there was the introductory stage where the teachers familiarized themselves with each other, their philosophies, and their ways of thinking. During this time, they did not ask questions of each other, but rather politely listened to the conversation. Also during this time, SD1 and SD2 talked quite a bit about general practices and pressed the teachers to describe their classroom practices. Fd, for example, discussed at length what she was doing to establish a whole language classroom. The curriculum specialist contributed to this conversation when she often asked Fd to describe what occurred in her classroom, or she described it herself. Fa also characterized her classroom practices and her interactions with students. There were similar discussions at School A. These teachers served as models for the other teachers.

The next stage of the staff development could be labeled the "breakthrough" stage. A breakthrough occurred when a person or persons moved through a line of thinking, or a way of doing things to a new way of thinking about the topic. Sometimes there were hesitations and concerns as a result of the newness of the experience, yet recognition of that newness served as an affirmation of change. At this stage the teachers asked "do you" questions. "Do you do literature groups?" or "When do you do skills?" were questions that they asked. When these questions were asked, all the teachers began to offer their options and suggestions. At the same time, the staff developers participated less. They were more often listening than talking. This is not to say that they were not engaged; rather they became participants rather than leaders.

Finally there was the stage of empowerment. In this stage the teachers claimed ownership of the staff development itself. It was in this stage that the staff development conversation was dominated by teachers. They arranged agendas, asked the questions and/or answered the questions and generally directed the sessions' focusses. Figure 6.1 illustrates the staff development process stages for both School A and School F. The content and processes of these stages in the two schools are described in Appendix D.

Discourse Analysis: The following questions were addressed in this section:

- o What percentage of the conversation was controlled by the staff developers and by the teachers? Were there differences from one session to the next? Between the two schools?

- o What was the content of the staff development sessions. What were the themes of conversation and whose were they?
- o How were classroom practices introduced into the conversation? Who introduced them? What additional conversation ensued from the discussion of a practice? Were the described practices embedded in theory?

Of particular interest to the staff developers were the possible differences between the schools. The sense of frustration around the sessions in School A was extremely high. The staff developers sensed that the sessions "were not working", and the teachers were frustrated. With an analysis of differences in discourse patterns between the two schools, the phenomenological sense of "not working" could perhaps be operationalized.

Research Procedure: The data consisted of videotapes of the group sessions ranging from 2 to 3 hours, each, the materials that were handed out at the meetings, the videotapes that were presented at the sessions, and material that teachers brought to the sessions to share.

The analysis of the tapes was initially guided by the overall intent of the staff developers: discussion of reading comprehension instruction premises, and presentation and discussion of practices and their theoretical and empirical justifications by both teachers and staff developers. A less structured ethnographic analysis approach as described by Bogdan and Biklen (1982), and Glaser and Strauss (1967) was followed. One staff developer and two graduate students who had been involved in the process viewed several tapes and met together to develop categories with which the discourse could be described. A system was developed, experimented with, and then altered. The analyses were then conducted on the videotapes of all of the sessions, with periodic meetings of the analysts who would view a tape together and revisit the meaning of the categories. The primary unit was a topic of conversation. For each new or revisited topic, the counter number on the videotape machine was recorded to obtain a sense of the length of time the group engaged in a particular conversation, as was the impetus for the particular topic (e.g., it was on the agenda, or based on a comment by a preceding speaker), who initiated it, the nature of the conversation, the discourse mode, and participation level. A page of this analysis is included in Appendix D.

The discourse mode categories emerged as practices were presented by participants in the videotapes. Five categories were subsequently used to describe the discourse mode of the description of practices. These were:

Sharing: This comes about when one participant is reminded of something s/he does or has done in the past, and talks about it with the rest of the participants. The practice is usually described in a personal, at times hesitant manner.

Show and Tell: A participant does something during the week, and prepares to talk about it at the session. S/he often brings in some material to back it up--some of the students' work, or a chart.

Lecture 1: This is a prepared presentation about an activity extracted from the literature or from observation. It is not generally described as something the presenter does or did. It is presented in a depersonalized manner.

Lecture 2. This is a formal presentation about a practice that grows out of a discussion, and is not prepared for in advance. It is, however, depersonalized.

A New Suggestion: A "new" practice emerges out of the conversation--something that the participants could try.

When a practice or activity was described by a participant, a separate form would be used. Recorded on this form was an activity description, who described it, the quality of the description in terms of theory and/or research justification, the types of questions/comments from the group, and whether there was subsequent follow-up or comments related to the activity. A copy of this form is included in Appendix D.

These two sets of data sheets constituted our secondary data source, and the subsequent analyses were generated from these.

Staff Developer and Teacher Talk: One goal of the staff developer was to present research-based practices, but only in response to concerns expressed by the teachers, when asked to by the teacher participants, or embedded within a conversation on a related topic. The ideal discourse contemplated was that the staff developers would move from being "in charge" to being consultant-participants, with the conversation controlled by all participants. It was felt that discussions should focus not on the staff developers' questions and comments, but on the teachers' own. By examining the categories related to who initiated the conversation, the impetus for and the nature of the conversation it was possible to categorize the conversation in the following manner: Staff Developer Talk (SDT), Staff Developer Initiated Teacher Talk (SDITT); Teacher Initiated Teacher Talk (TITT); Discussion. Staff developer initiated teacher talk involved teachers responding to questions or prompts from the staff developers; whereas teacher initiated teacher talk involved spontaneous or other-teacher prompted teacher talk. In addition, it was possible, by looking at the tape counter to

determine the percentage of talk in each session within each of these categories.

The information in Table 6.1 presents the percentage of time devoted to the categories in each of the staff development sessions.¹³ The percentage of SDITT was consistently higher in School A than in School F, except for the first session; perhaps this is what led to the staff developers feeling that the sessions were not working because it was like "pulling teeth" to get the teachers to talk. It did not decrease in School A until the "make or break" session 9. The session following this one involved a confrontation between the staff developers and teachers concerning the purposes of the staff development and the style of the staff developers. As mentioned above, the staff development in School A shifted to the empowerment stage at that point: the stage in which the teachers claimed ownership of the staff development itself. That shift had occurred much earlier in School F, with very little trauma on either the teachers' or staff developers' part, as indicated by a steady decrease in SD talk and an increase in TITT and Discussion from Session 5 on.

Content of Sessions: To provide a sense of the flow of a conversation, topic maps were created for each session. The first column described the major topics and subtopics under it. The second column named the initiator of the topic. The third column describes the discourse mode, and the fourth, what type of conversation, if any, followed. These were used to examine the topics of conversation and their initiators; in particular the themes that emerged across the two schools.

While the teaching of reading comprehension was the stated content of the staff development, the conversation often moved away from reading comprehension practices and their justifications into two additional areas: writing and other language arts, and testing/assessment and grading. The time spent on the latter was quite surprising to the staff developers, and led to a certain degree of frustration; and yet, since assessment was very much a part of what teachers considered problematic about the teaching of reading comprehension, this was clearly a topic that had to be addressed in a staff development program designed as constructivist.

Anders, Richardson and Morgan (1989) describe, in depth, the amount of time over all sessions spent on the topic of assessment. At both schools, approximately 20% of the discourse time was devoted to issues surrounding grading, testing and

¹³Percentages are provided rather than absolute numbers since the counters on the different videotape machines used in the analyses related to different measures and were thus not comparable.

assessment. In School A, all but 4 of the 11 sessions had a high proportion of time devoted to the topic, and in School F, all but one of the eight sessions contained conversation related to testing.

In addition, a major topic that emerged often in both schools related to the use of literature in the reading program. Both of these topics were of some surprise to the staff developers, particularly because the research review had focussed on a more narrow definition of reading comprehension and thus did not address issues of assessment or use of literature in teaching reading.¹⁴

The major themes throughout the two staff development programs, and their initiators were:

Staff Developer Initiated:

- o Problems with Basals: How do the skills activities relate to reading? The differences between basal passages and authentic literature; How is readability decided?
--Whose questions are being asked in the comprehension check section? (This topic was taken over by one of the teachers in School A.)
- o A constructivist view of the reading process, particularly as demonstrated through the concepts of background knowledge, concept mapping and brainstorming.

Teacher Initiated:

- o The use of literature in teaching reading comprehension.
- o Barriers to different ways of teaching reading because of grading and testing requirements.

The staff developers stated to the teachers at the beginning of the sessions that they were not promoting one way or another to teach reading, but were hoping to help teachers become better at what they were doing within their own belief frameworks. However, an analysis of the tapes indicates a clear preference toward an interactive view of the reading process, and a decidedly anti-basal-reader sentiment on the part of the staff developers.

¹⁴ There were several factors contributing to this interest: a strong movement within the school district to move to literature in the primary grades; and a growing "grass roots" movement toward whole language in the teaching of literacy.

Table 6.1
 PERCENTAGE OF TIME: STAFF DEVELOPMENT CATEGORIES

Session	School A (in %)				School F (in %)			
	SDT	SDITT	TITT	DISC	SDT	SDITT	TITT	DISC
1	66	7	1	25	67	18	0	15
2	22	36	5	37	15	10	13	62
3	23	29	7	41	30	12	16	35
4	61	9	5	25	40	8	27	25
5	28	7	13	51	27	2	17	55
6	9	11	26	54	15	3	25	57
7	27	15	12	44	14	0	12	74
8	23	10	25	42	13	0	14	72
9	9	4	6	80				
10	36	1	31	32				
11	15	5	5	75				

SDT = Staff Developer Talk
 SDITT = Staff Developer Initiated Teacher Talk
 TITT = Teacher Initiated Teacher Talk
 DISC = Discussion

Figure 6,2
 FOLLOW UP TO PRACTICE DESCRIPTIONS

Presentation Style	Theory/Research Embedding	Interest Level/ Style	Follow-up Discourse
Sharing	Low	High--leaning forward	Some discussion
Show and Tell	Low	Polite	Some polite questions
Lecture 1	High	Medium High leaning back taking notes	"How to" questions (management)
Lecture 2	Medium High	High, sometimes taking notes	Considerable discussion, questions
"New" Suggestion	Low	Polite	Little

differences. When sharing a practice was embedded within a conversation, the interest was intense, with participants "leaning into" the conversation. Several times, however, the topic of a shared practice seemed inappropriate to the content of the conversation. In such a case the reaction was polite, but non-engaged. The reaction to Show and Tell presentations depended upon the teacher presenting the practice. In the case of one teacher (Ab), his show and tell presentations were largely ignored except by the staff developers; for another teacher (Fd), they were listened to carefully, and numerous questions and discussion followed.

For both Lecture 1 and 2 presentations, the participants would lean back, and some would begin to take notes. However, there was much more animated discussion following Lecture 2 than Lecture 1. Questions following Lecture 1, by a large, related to management. For example, in a Lecture 1 description of literature groups, the questions revolved around how to obtain complete sets of literature books; how to ensure that all students kept up with the reading, etc. The Lecture 2 discussion, however, would revolve around theory and practice; the why's of a practice. Discussions and conversations were lengthier following Lecture 2 presentations.

The quality of the presentations differed substantially in terms of the degree to which the practices were related to theory and research. When either staff developers or teachers shared a practice, they did not discuss theory or research except possibly the outcomes of the particular practice. One role of the staff developer that emerged in the first several sessions was to follow a shared practice with a restatement of it within a theoretical framework. This happened even when one of the presenters was a staff developer. Another staff developer or a teacher would embed the practice within a theoretical framework. For example, one Staff Developer shared a journal writing practice with the group. SD1 subsequently talked about the empirical work in journal writing.

The Staff Developers' Lecture 1 and 2 presentations were always strong in their reference to theory and research, and often the teachers' were as well. Show and Tell presentations seldom related to theory, but often did to empirical results.

Interpretation: The analysis of the discourse data of the group staff development process contained several surprises and illuminated the difficulty in implementing a constructivist-empowering staff development process with a preconceived content.

One surprise related to the number of practices described by the teachers in comparison to those described by the staff developers. The staff developers had a "shopping bag" full of research-based practices; in fact, there were 89 categories of

practices, some containing a large number of tested procedures (see Chapter Three). We resisted attempts to "just present a practice" without the teachers expressing an interest in or a problem with a particular area. This, perhaps, was the most difficult aspect of our work with School A. Dialogues similar to this one occurred a number of times:

- T: Just tell us about a neat practice--something you think is a good idea.
- SD: That's not the purpose of this staff development. The purpose is to focus on your problems, frustrations, and practices; or you may select, together, an area that you all are interested in learning more about, and we can talk about a variety of practices related to that area; then you may select one or two to pursue.
- T: Ya, but you know the neat and new ones; the ones you think we should be doing.

We were considered the University people: "You people at the University have the time to go to the library and figure these things out; then you can just come and tell us what we should do" (Af). While this pressure did not occur as much in School F, the Curriculum Coordinator suggested to us several times that we should probably have more "things" for them to walk away with. She was referring to xeroxed copies of short statements about practices and steps for implementing them. We resisted these demands; but found it awkward to do so. Interestingly, the few times we succumbed and presented practices related to mapping and brainstorming, they did not seem to be readily implemented.

Since the teachers did not select practices from the list they had received, the staff developers seldom gave Lecture 1 presentations. Those that were presented in this style were received with a change in body posture and questions related to how to implement them in the classroom: typical of the way in which such presentations are received in top-down staff development sessions. On the other hand, Lecture 2 presentations seemed to "work" within our goals for the discourse. These presentations emerged out of the conversation, were embedded in theory and research and were not planned. They were attended to in a similar manner to sharing style, except that some teachers took notes. Discussions concerning research and theory followed the Lecture 2 presentations. Thus, Lecture 2 presentations appears to be the style of presentation that best met the goals of this type of staff development process.

Discussions were always well received by the staff developers. However, we wished to move away from the type of discussion in which we were the switchboards; that is, in which the teachers were addressing their comments to us as the experts rather than to the group or to each other. Excerpts of a conversation which approached our ideal is presented in Appendix D. This was a part

of Session 11 at School A; the session which was described as "empowerment". While we had tried to deal, several times, with the question of where meaning resides--in the book, or somewhere between the book and the mind of the reader, we dealt with it in depth in this session. In this conversation, everyone became both learner and teacher. It is not clear that anyone changed their basic position, but they certainly deepened their understanding of their own positions. For the staff developers, this was the ideal conversation--the type of conversation toward which we had been working.

III. STAFF DEVELOPMENT AND SCHOOL CONTEXT

As pointed out in Chapter five, there were a number of differences among the schools in terms of norms, leadership styles and perceptions of collegiality. It was expected that these differences would affect the implementation and outcomes of staff development in the various schools. A comparison of Schools A and F suggests that context did affect the staff development process, but in directions different than those predicted by the context study.

Evidence from the effective schools research (Little, 1986; Rosenholtz, 1985) would have predicted School A as a successful school with a positive school culture that would positively affect the staff development process. The principal was considered a strong instructional leader; the teachers seemed collegial; the student body seemed engaged in the learning process. Unfortunately, however, these aspects did not translate into a process that was compatible or, at least at a surface level, effective. After considerable contact with the schools, the researchers sensed that School A's collegiality was social only. The teachers sensed differences in the way they taught reading, and found it uncomfortable to discuss their beliefs in front of each other. They pushed for the staff developers to "tell them how to teach reading", rather than examine their own beliefs and practices and work with the staff developers as consultants. This school did not reach the empowerment stage until the last session.

School F, on the other hand appeared to be a school with problems. The teachers did not like the principal, and they rarely met together as a faculty to discuss practices or anything else. The culture was one of individualism and distrust, although the teachers did share a negative perception of many students. And yet, the staff development process in this school was successful. The teachers moved more quickly toward the empowerment stage, became much more collegial, and changed beliefs and practices.

It would appear, then that the particular code of collegiality in School A strongly affected the staff development process. In

School A, this code a) did not allow teachers to enter the rooms of colleagues; b) did not permit a teacher to talk about the rationale for a practice with another teachers; c) maintained a congenial social atmosphere. School F did not, on the other hand, appear to have such norms. The only real norm seemed to be an expectation to dislike the principal. This seemed to allow teachers in School F to move more quickly into discussions of practices and beliefs.

IV. STAFF DEVELOPMENT AND CHANGES IN TEACHER BELIEFS

Changes in Theories of Reading

As described in Chapter Five, on the basis of an analysis of the ethnographic belief interview, each teacher was placed on two continua that emerged from an analysis of the interviews. These two continua were 'Reading/Purpose of Reading' and 'Teaching/Learning Reading'. These two continua produced four quadrants, three of which relate to extant theories, and one of which does not. All teachers in the original sample were placed in one of the four quadrants (see Table 5.1).

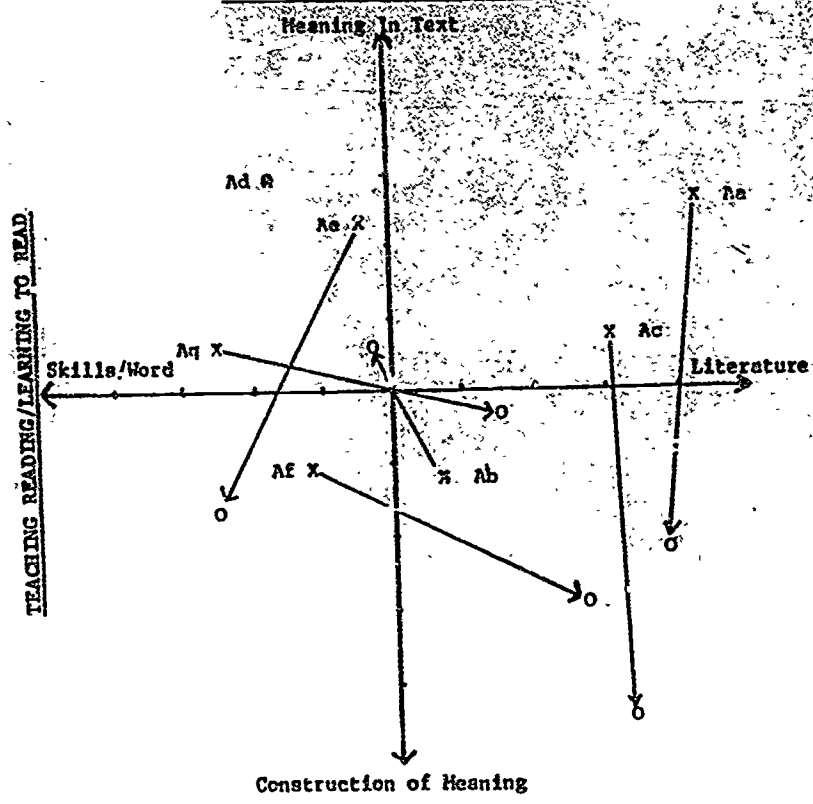
The teachers were again interviewed at the completion of the staff development process. The protocol is included in Appendix D, as is the coding scheme for the second interview. The same process for determining each teacher's placement on the two continua and in one of the four quadrants was followed in analyzing the second interview. In this analysis, teachers in the three schools that received the staff development were included. Figure 6.3 presents the changes in theoretical orientations for each teacher by school. The 'x' represent the initial placement, and the 'o' represents the new placement.

One can see from this figure that there were considerable shifts in theories of reading, learning to read, and teaching reading. With several exceptions, the theories shifted toward the literature and construction of meaning ends of the two continua. In other words, beliefs were moving toward Quadrant III, the 'Whole Language' quadrant. There were several exceptions. In School A, Ad did not move at all. Ad was taking other courses at the University, and was absent from meetings more than anyone else. Ab shifted from Quadrant III to Quadrant I. Ab's initial interview contradicted the practices as observed in his classroom; and it was felt, at the time of the first interview, that he was attempting to impress the staff developers. Ae moved toward the construction end of the continuum, but also toward the skills/word end. Ae was a relatively inexperienced teacher, and in her initial interview, she vacillated on the teaching reading/learning to read continuum. She was quite clearly on the skills/word end in her final interview. In School C, Ci shifted toward the Skills/Word end of the continuum. Her final interview took place in the fall following the staff development program;

Figure 6.3

CHANGES IN THEORIES

SCHOOL A
READING/PURPOSE OF READING



SCHOOL F
READING/PURPOSE OF READING

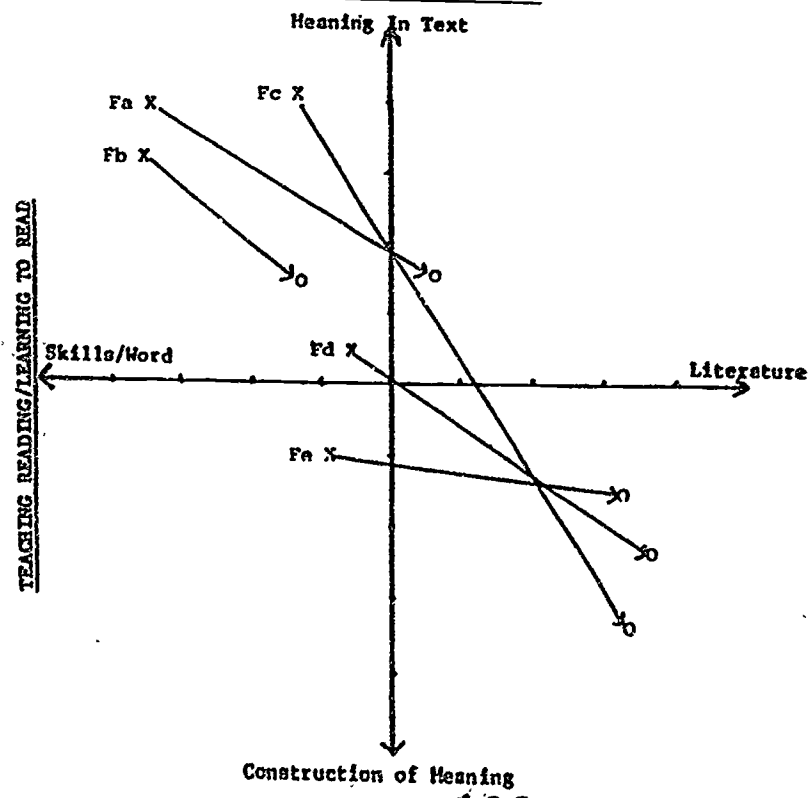
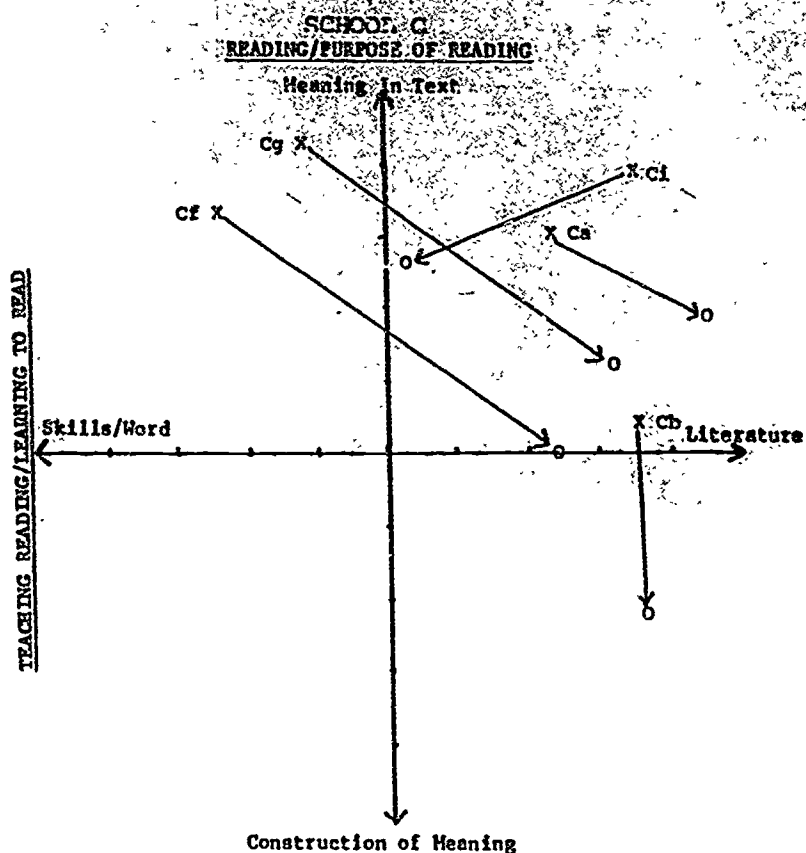


Figure 6.3 Cont.



X = Original Theory Position (1st Belief Interview)

O = Post Theory Position (Final Belief Interview)

and she was then teaching Grade 2. She perhaps was influenced by a sense of needing to work more on phonics than on reading comprehension.

Changes in Beliefs

A content analysis of the final belief interviews indicated that large changes in beliefs were represented in the teachers' stipulative (definitional) premises concerning reading comprehension. Many moved from a short definition in the first interview that implied that reading comprehension was being able to answer comprehension check questions accurately, to a much broader and deeper, more cognitively-oriented definition. For example, Ca responded to the question concerning reading comprehension in the final interview in this manner:¹⁵

It is understanding what you read. And like I said, when you read different novels or different materials it depends on what you read before, so I think it would be really important to talk to kids about, tell them that. You know, when you read a novel, it doesn't always make it, doesn't always matter if you understand everything because from context you can figure it out. But in reading social studies it may really matter if you get the dates wrong or if you get the main people wrong. . . .in the past I always taught it in terms of you know, reading the book, the story and then you answer the questions and then you pull things out of the story and you quiz the kids and they answer properly. I think one of the big things is they can take what they have read and apply it to something else. You know, can they, well I guess the higher level learning. . . .

In the first interview, when asked to define reading comprehension, Cf responded:

You have to be able to start with the basics and have the background to be exposed to different words so that when you see a word in print, not necessarily the first time you have heard that word. So its understanding the words, understanding the words that are put together in a sentence.

In her second interview, she stated:

¹⁵ These quotes are excerpted from their responses, with an attempt to maintain the flavor of the response. The responses to the questions concerning reading comprehension increased dramatically in length from the first to the final interview.

Well, understanding what you have read is I guess the very top layer, you know. Besides that I think is understanding, not understanding but how you feel about the book. You know, what is between the lines kind of. When people read different things that the author has written down they each feel differently about it and how do you feel about it and what does it make you think about and what does it mean to you. You know how the characters are feeling and how does that relate to anything that you have, that happened to you. Can you, do you understand that or is it something that is so foreign to you. . . .

Several teachers expanded the definition of reading comprehension to comprehension in general. Af, for example, stated:

I think reading comprehension is part of the larger question of comprehension in general which is related to an even larger question which is meaning making which has to do with what connections do you make...between what you're getting outside and among all the things that you have inside. Generally, the more connections you make the better, but there is sort of a critical point and I don't know what that critical point is, but some kids make too many connectionsI will often say to them [the students] why do you think we are doing this, what do you think we might try ...I think this facilitates their meaning making. . . .

There was also a change toward the sense that there are multiple purposes for reading, and that this affects the definition. In her first interview, Fc defined reading in a very short and straight-forward statement: "Well, first thing that came to my mind was: understanding what is read. Also, it is being able to give it back." The following dialogue occurred during Fc's final interview:

I: How do you see reading comprehension now?

T: Well, I see it on different levels. I see it as facts, reading facts and coming back with answers to specific questions and I see it as a different...its different in different subjects. And I see right now I think, literature is more a feeling you get from the literature, an overall feeling whereas comprehension in social studies or science is more facts. And yet as I say that, I've gotten away from that into more reporting and more studying of other specific areas. Like the reading of the Civil War in the social studies book is so hard to do; its boring and there are so many facts paragraphed and its very difficult.

So some of those facts we need to know in certain areas so I'll have them read that and they'll have a facts answer sheet. But general feeling about the war, the feeling about the slavery, the feeling about fighting. I'll teach that differently. So I see comprehension on different levels.

I: You're talking about it differently in subject areas than you are in literature. It sounds like part of that is also seeing literature in a different way than you did before.

T: That's right. I saw literature only in the structure of the basal.

I: And how do you see it now?

T: The basal gives you a right and wrong answer. Its right or its wrong. Now there's no right or wrong.

And last, an important theme in the follow-up interviews was that reading comprehension became the reading of literature, rather than performing skills and reading comprehension check exercises in a basal series. When asked about the definition of reading comprehension, Aa immediately started to talk about literature:

The three books we had were all Newbury Books and what I stressed more than anything else in these groups. . . all year long all they had to do to prove to me that they were reading a book was to feed back the plot element to me. This was a big change and it had to do with comprehension and it was hard for them to understand the words that I used like insight and reading between the lines and that kind of terminology really was meaningless to them. . . .but that's what the author is encouraging us to do, to put in our own perceptions and there might be disagreements in the group here and somebody else might think no that's not what she was thinking. To me that was getting into some real comprehension at least in fiction. . . .

These quotes indicate both a change in thinking and language. Af found herself as more articulate about her reflections at the end of the staff development:

I think I'm formulating strong beliefs about reading that I maybe had before that...see in the [initial] belief interview I don't think I stated anything very strongly.. . .yet I know I have strong beliefs.

Getting them articulated and meshed is another thing. .
 . .I think I have been a lot stronger today [exit
 belief interview] about positions and about what I
 think is important.

When asked questions concerning reading comprehension, the teachers would hesitate and then, in general, talk extensively and in depth about the topic, often expressing some remaining confusion about the topic. Such confusion, however, did not trouble them.

I'm finding the definition of reading comprehension more complex than probably I've ever defined it before. I probably have more questions about it than I had before. Unanswered questions. I don't know if there are answers to defining reading comprehension because there's so much. It has reinforced the feelings that I have had all along that the kinds of testing and materials that we use for standard adoption aren't adequate for reading comprehension. . . .I think teachers need to feel more and more that you can do good reading comprehension while you are doing social studies and . . .science and its not just text book stuff. . . .

I: Do you feel okay about having lots of questions now about reading comprehension?

T: Sure because I'm going to keep looking. . . .(Fa)

Changes in Practices

Self Report: In the final interview, teachers were asked if they were doing anything differently. They were also asked a number of questions that would reveal their practices which could be compared to their initial observations and interviews. The following themes emerged with respect to changes in practices:

1. Less reliance on the Basal Reader. The major change in the teachers' theories of reading toward the literature side of the teaching reading/learning to read continuum was expressed in their descriptions of practice.

Again the idea of webbing and framing, of using literature more. I see great strengths there that I would not have...because I wasn't using literature that mesh with reading comprehension and content and so forth. The first change is literature. Getting the kids hooked, it doesn't take a lot because they like it. I think the feeling of throwing away some of those text books, the old traditional things, get rid of them. We need some fresh material, but not just fresh

materials, but fresh approach and I think that's part of what staff development has given me. (Fa)

Well, I don't think I've ever said this before today, but in looking back at the basals there really are some dumb stories in there. No wonder kids are turned off to reading some of the things that they have to read. And I'm going to be very careful next year and make sure if I do use anything from a basal that its going to me something that's interesting to the kids based on past experience. (Ab)

2. The Use of More Prereading Activities: A strong emphasis in the staff development program was related to strategies designed to activate and build background knowledge, two of which were mentioned by Fa in the preceding quote. Several sessions in all three schools revolved around discussions of the theory and practices related to background knowledge. In two of the schools, practices were modelled in individual teachers' classrooms, and tapes of this modelling were examined by the group. This emphasis was reflected in the teachers' descriptions of changes in practices. For example, Ae stated:

Well, I'm starting to get more into exploring a little bit the prior knowledge thing because I can see more that can be of benefit. Investing more time in the prior knowledge, the payoff is greater, I started to see that and so I would like to explore that more and try some more activities next year in that area. . . .its like they are reading for a purpose so to speak.. . .once they start thinking of these things that they know or they don't know they hear from what someone else says and its kind of just like this combination of foundation of where we're going to go from and then they go to it. . . .¹⁶

3. Integration of Literature into Other Subjects: Many teachers came to the realization that reading could be taught in other subjects besides reading. One type of integration that a number of them stressed was between literature and social studies. Another teacher (Fc) developed a science/science fiction unit in which they would spend half days on reading science fiction.

¹⁶ In many of these quotations, we have tried to include the teachers' premises that relate to the practices, since a major change from the first to second belief interview was their language, and, in particular, their statements of theory concerning why a practice worked.

4. Different Practices in Grading/Assessment: A strong theme in the discussions in all three schools concerned grading and assessing reading comprehension (see Anders & Richardson, 1990). Teachers were anxious about grading, and many could not consider changing their reading programs without first considering what such changes would mean for assessment. On the one hand they reified standardized tests because they were "objective", and on the other, they mistrusted and often did not agree with them. Initially, a number of the teachers graded absolutely everything, including drafts. They felt that they would be more objective if they had numerous data points for each grade, and average them for the report card grade.

As evidenced in the final interview, a number of teachers began to relax about grading, and develop systems that, they felt, came closer to what reading actually is. Several quotes follow:

last year we gave them tests and you know, kids fell into different places and uh...I think it is more accurate having experiences with them and I could sit them down and do this you know all the little markers on there but I am not going to because I don't have to put them into a reading group, so I don't need to do that. . . .I am grading them on do I see them reading, I am grading them on how much they have read.(Ca)

. . . .The grading process as you can see on my desk is not one of the ones that I concentrate on any more. Its more observing technique, watching them grow, talking with them, going up to them when they are doing comprehension questions...and it sounds so cliché, so fantasy like that you can do this [not grouping by ability], but its really, really possible. . . .Its work, its not an easy thing to do, but if you're not so concerned about grading papers, it can happen.(Ac)

In addition, the teachers expressed differences in relationships with other teachers on the basis of the staff development process. The teachers in School A were socially collegial, but recognized that teachers in the school taught reading in very different ways; thus they seldom talked about practices or beliefs. As Ab stated, "I really don't talk too much about those things with other people. . . .I'm just not sure how compatible I really am with other teachers." Towards the end, Ad suggested that they had changed somewhat, and that his colleagues realized it was:

harder to talk about that because...we were all very different, a little defensive...and that's loosening up...I think that the sharing that we've done in the workshops has loosened people up a bit, to feel that they could share more across philosophic lines, and

were a little afraid to talk about it, to ask about it, to ask about something you see someone's doing, and not necessarily to have to say: "Oh yea, I do that too" but be able to ask in awe or wonder, "what are you doing"?

The teachers in School F wholeheartedly acknowledged the project for its contribution to collegiality. Prior to the staff development, the teachers did not often have, or take, the opportunity to meet together, let alone discuss practices. The staff development provided them with the opportunity to get together and talk:

The only time we really talk is when we meet together on Wednesdays [during the staff development]...For me, its because in the intermediate grades, there's a lot of complaining that goes on, and I don't want to be part of it, so I just don't". (Fd)

[We] have time to talk about philosophy and long range kind of planning. So I think these kinds of inservices are welcomed...I think we need more of it. Being able to see ourselves teach on tape is a wonderful thing to be able to reflect on...see things you don't have any idea you're doing. (Fb)

Observed Changes: Classrooms were observed on a continual basis throughout the staff development process, and a number of changes in practices were observed. Changes in School A and F are noted below:

In School A, Ae was willing to use practices discussed in the staff development sessions, and she was observed to be using them in her classroom. One such strategy related to questioning. Unfortunately, it was not clear that she connected the practice to any personal or research/theoretical base. Ae, however, did consider herself an "immature" teacher, just developing her practices, and therefore, seemed willing to try anything once. It was not clear, however, that these new practices became her own, because she would not discuss them.

Three other teachers, Ac, Ad, and Ag claimed to be relatively unchanged in their practices when interviewed toward the end of the project. Given these claims, it was particularly interesting to note in observations toward the culmination of the project that two of them were employing practices quite different than those they used at the beginning of the project. Ac, for example, very carefully addressed the background knowledge of her students when preparing for a reading assignment which, rather than coming from the basal reader, was drawn from popular literature. Ag also spent considerable time drawing out what his students knew before undertaking a reading assignment. On the other hand, changes in practices were not observed in Ad's

classroom (the only teacher who did not change theories of reading).

All of the teachers at School F were interested in change and were willing, in varying degrees, to engage in the process. Fd, the most outspoken of the teachers, was engaged in the change process prior to the staff development, having decided to shift from the basal to the whole language approach to reading. As her change process evolved, she shared her experiences with the group. Other teachers explored and experimented with a number of practices, such as semantic mapping, that were described during the staff development. Fc, for example, established herself initially as a basal advocate. She used the stories, the comprehension checks and the skills work, and she graded all of the students' work. As the staff development sessions progressed and Fc listened, she began to talk about "doing reading a day at a time". She also began to think about novels, which "she had never done before". She asked more of her own questions after reading, and toward the end of the year, she implemented an activity in which students could choose from among three novels. She also adopted Fd's grading system, in which portfolios were maintained and more "subjective" measures were used.

Fc took a great leap from basal to novel, although not without concerns for assessment and student interest. To compensate for some of her concerns, she worked in skills whenever she could. As the staff development process progressed, less and less time was spent on skills and more was devoted to reading and discussion.

Teachers' Views of the Staff Development Program

The ways in which the teachers in School A and F viewed the staff development processes reflects the differences in the processes in the schools.

The comments of the teachers in School A reflected a process felt by all participants, including the staff developers to be difficult. As noted above, the breakthrough and empowerment phases came quite late in the process. The teachers had wanted answers. Also, the means they had developed for dealing with the differences among themselves was social collegiality--a laissez-faire approach on the surface, but with some deep resentment and anxiety below. The staff development asked them to reveal their beliefs and justifications. While all teachers agreed that the staff development was extremely valuable to them and (surprisingly) they would jump at doing it again in another subject matter, they all mentioned problems.

Three of the teachers (Ad, Ag and Af), for example, suggested that the program should have focussed more on the individual teacher rather than the group. Ad articulated his reasons: He was

uncomfortable with saying what he was doing and why because: "You felt like 75% of the people were saying no you are wrong."

Most of the teachers enjoyed hearing from other teachers about what they were doing in the classroom. Ad revealed in his comment the nature of his notion of collegiality prior to the staff development. When asked what was valuable, he stated:

I think hearing what a few others are doing in their classrooms and I think it also lead to some lunch room discussions of what was going on in the group...what was going on in the classrooms. I'm not above stealing an idea as long as it isn't exactly the same thing someone down the hall is doing. And I have no qualms about someone taking an idea of mine and doing something with it. I got some of that. I suppose I found out more of some political leznings of some people. What they think school is all about, which is nothing more than just being interested, there is nothing to do with it.

Aa, on the other hand loved the philosophical discussions. And Af, after complaining in the interview at some length about the staff developers not providing her with answers, and not nurturing her stated: "Its easily the most valuable inservice I've participated in." She also stated that she "would jump" at another opportunity.

School A's response to the inservice could be summed up by Ac's similes:

It was like doing calisthenics and sometimes I just wasn't in that frame of mind and it was just too tiring. But yet I knew it was good for me. Kind of like eating brar. you know. You don't always want to do it, but you know you should.

School F's teachers, on the other hand seemed easily to have moved into the breakthrough and empowerment stages. They seemed more comfortable to take over the direction of the process, and to discuss practices and beliefs. Two quotes sum up the views of School F teachers toward the inservice.

. . .there wasn't...when we came here we didn't have to necessarily follow any kind of a format. That everybody was able to speak freely and I think that's important. And I think that allowed everybody a lot in the area of growth and those people who were thinking about changing had the opportunity to ask for the help that they needed. For me, personally, as I said the first few meetings I felt real defensive and I guess it allowed me to eventually...speaking and noticing my

defensiveness allowed me to share my convictions I guess. And when you're sharing your convictions, you don't have to be defensive. (Fd)

I thought it was fabulous. Firstly, just to be able to sit and talk to people about the aspects or even teaching has been wonderful. And it's been very profitable, but at least in my mind it allowed me to look at what I was doing and to judge it, to think did I want to continue doing that or was I capable of changing and was I willing to take the risk to change. . . . The meetings that we had were completely new to me, opening my eyes to what is really going on. To discuss what is comprehension is a very difficult thing to do because I hadn't... I was like a puppet. I went through all the motions and did all that I was supposed to do and never questioned it. (Fc)

V CONCLUSIONS

The staff development program described in this chapter was a difficult process to implement for several reasons. First, it was long term--it went on for longer than a semester in all three schools. It was intensive, in that it worked with both individual teachers and the group. And third, it broke several norms related to both staff development and school context.

Staff development is usually top down, with the staff developer describing and providing training in a program that the school district, principal or a majority of the teachers in a school feel would be good for teachers to implement. While teachers often complain about such programs, and resent being mandated to change their practices, such a program allows teachers to maintain a certain amount of autonomy. In such staff development programs, teachers have the opportunity to become actively involved or not. They do not have to reveal their inner convictions about the new program, and they often are able to ignore the program in their own classrooms.

The staff development process described in this chapter compelled teachers to become actively involved in understanding and justifying their own practices and asked them to consider directions in which they could change. Revealing one's own beliefs to yourself and others is perhaps quite scary, particularly if done in a somewhat nontrusting atmosphere. In one sense, it reduced, at least initially in School A, the sense of autonomy that would permit teachers to accept or ignore any of the recommendations provided in the staff development.

The second norm that was broken, particularly in School A, related to what Lortie (1975) calls the individualism norm that allows teachers to keep from revealing to fellow teachers their

practices and justifications. School A teachers had developed a social interaction manner that precluded the discussion of classroom practices; thus the group sessions were difficult to implement. The teachers in School F seldom interacted at all; thus it seemed to be easier for them to begin more quickly to talk about practices.

In our staff development process, we were viewed as the experts, in that we held the knowledge related to the subject matter of the staff development process. This sense of our being experts was held more strongly by the teachers in School A than School F, perhaps because the School A teachers were less experienced. Anyon (1981) experienced such an attitude in teacher responses to her presence in the school she classified as middle-class, as compared to the teachers in the working-class, affluent and executive elitist schools. She described the fifth-grade teachers in the middle class school as viewing her as "an expert who had the correct answers regarding child development, curriculum, and discipline" (p. 39). The demographic characteristics and school norms in Anyon's school were similar to those in School A.

In addition, however, we were ambivalent about our role. On the one hand, we wanted the staff development process to become owned by the teachers; on the other, we wanted the conversation to focus on our content. In the initial sessions in School A, our frustration with being placed in the "expert" role, as well as that related to the teachers' seeming inability to shake loose from barriers such as testing, was sometimes evident on the videotapes. We challenged, pushed, frowned and sighed. In so doing we probably delayed the onset of the empowerment phase.

Nonetheless, the changes in teachers' beliefs and practices in both schools were extensive. All teachers but one developed deeper understandings of reading comprehension, and changed their beliefs in a direction that more closely matches the assumptions inherent in much of the current research and thinking on reading comprehension. Their practices also moved in this direction.

CHAPTER SEVEN

IMPLICATIONS OF THE STAFF DEVELOPMENT PROGRAM
FOR STUDENT LEARNING¹⁷

I BACKGROUND

The chapter responds to the fifth question in this research project: What were the effects on students' learning of a staff development process designed to introduce research-based understandings of reading comprehension into teachers' thinking and practices. This staff development process constituted the third phase of a project that explored the degree to which elementary teachers use research-based practices when teaching reading comprehension to their fourth through sixth grade students, barriers that keep the teachers from doing so, and ways of improving the staff development process.

The preceding chapters discussed the role of the school culture and the role of theory in the staff development process. This chapter explores the effects that the staff development had on the outcome variables of student learning as measured by standardized measures of reading.

For this chapter the student learning in two schools participating in the staff development will be compared and then contrasted to a subsample of students in contrast schools whose teachers did not participate in the staff development. The two staff development schools were A and F; the same schools discussed in the previous chapters, with the staff development in School A having the phenomenological sense of "not working," while the staff development in School F having the sense of "working."

The Student Learning Measures

Two standardized assessments of reading were used to measure student learning: Iowa Test of Basic Skills (ITBS), Reading Section (Hieronymus & Hoover, 1986) and Illinois Goal Assessment Program (IGAP), Reading Section (Valencia, Pearson, Reeve, & Shanahan, 1988). The first instrument is the assessment tool utilized each spring in the state of Arizona to assess children in the public schools. It is characteristic of more traditional measure of reading and reading comprehension. In contrast, the IGAP is a relatively new instrument, based upon the current research and models of the reading process. In a number of ways

¹⁷ This chapter is taken from: Bos, C. & Anders, P. (1990). Implications of the staff development program for student learning. Presented at AERA, Boston.

it is not characteristic of typical measures of reading. Both instruments will be described in greater detail, particularly the IGAP. The IGAP was selected for use with in this study because it was judged as representing a better match for the interactive model of reading being used by the staff developers. Hence, in comparison to the ITBS, the IGAP should be more sensitive to the impact of the staff development.

Iowa Test of Basic Skills: The ITBS is a long standing, group administered, standardized measure of academic achievement. It was constructed to reflect developmental growth in the fundamental skills of listening, word analysis, vocabulary, reading, language, work study, and mathematics.

Theoretical bases. The ITBS battery was designed to diagnose student strengths and weaknesses. In theory it analyzes specific, sequential, subskill areas and provides information which may be useful in planning instruction. The reading process is represented as a complex one with the assumption that a good reader is one who apprehends the author's meaning, grasps the significance of the ideas presented, evaluates them, and draws useful conclusions (ITBS Manual for School Administrators, 1986). The test assumes that the reading process can be divided into subskills grouped into three general categories: facts (to recognize and understand stated factual details and relationships), inferences (to infer underlying relationships, and generalizations (to develop generalizations from a selection). Sixteen subskills are measures across the three general categories.

Characteristics. The ITBS assesses students from Kindergarten through high school. At the intermediate grades, each test is a wide-range assessment. Results from the test are provided at the individual student, class, school, and district levels. Subskill analysis for each student is also available.

The reading comprehension portion is based on a wide selection in terms of types of text found in school materials including newspapers, magazines, encyclopedias, government publications, textbooks, and original literary works. The passages vary in length from a few sentences to a full page of text. All items contain a single correct response in a multiple choice format. After reading a passage, students read each related item and select what they judge to be the best option.

Items for the test have been selected based on preliminary tryouts in Iowa followed by national tryouts. Item difficulty and discrimination are computed and used as criteria for item selection along with subjective considerations related to the match between the skills objectives represented by the items and instructional objectives and the mental processes required of the students.

From the Reading section a number of scores can be generated. In making norm-reference interpretations, scores are usually expressed in terms of percentile ranks, stanines, and normalized curve equivalents (mean of 50, standard deviation of 21.06).

Internal consistency reliabilities for the reading section are within acceptable limits at the fourth through sixth grade level (above .90). Factor analysis of the tests indicate the consistent loading of the reading section on a factor labelled reading and verbal. Concurrent validity as measured by the correlation of the ITBS with other national standardized measures of reading achievement fall within acceptable limits.

Illinois Goal Assessment Program: The Reading Section of the IGAP was developed through the Center for the Study of Reading at the University of Illinois and the Illinois State Board of Education. This section will discuss its theoretical and research bases, development, and characteristics.

Theoretical underpinnings. This assessment was developed in response to a growing concern about the manner in which reading and reading achievement were and continue to be measured in the public schools (Johnson, 1983; Valencia & Pearson, 1986). The concern grows out of conflict between our emerging views of the reading process and reading instruction and the models of reading that underlie most current assessment practice and procedures (Pearson & Valencia, 1987; Valencia & Pearson, 1986).

Recent theoretical and instructional research in reading has emphasized reading as a constructive and interactive process (for a review see Pearson, 1984). The reader is strategic and thoughtful using clues from the text, background knowledge concerning the content and strategies for reading, the reading context, and other resources to construct meaning from the text. Such a model suggests that skilled reading is reflected in the reader's awareness of how, when, and why to use resources for the goal of constructing meaning and that skilled readers use this knowledge flexibly across differing reading situations (e.g., Campione & Brown, 1985; Pearson & Valencia, 1987; Spiro & Meyers, 1984). Reading may then be characterized as interactive as well as constructive in that it is the interaction of the reader, author, and text that results in the construction of meaning (e.g., Anderson, 1984; Rumelhart, 1980). This model of reading de-emphasizes the concept that reading is a set of subskills that when aggregated produced an expert or skilled reader.

Pearson and Valencia (1987) argue that while research portrays an interactive, constructive model of reading, the resemblance between this model and the manner in which reading is being measured in most widely-used standardized achievement measures is minimal. For example:

Prior knowledge is a major determinant of reading comprehension, yet we mask any relation between (content) knowledge and comprehension on tests by using many short passages about unfamiliar, sometimes obscure topics. Real stories and texts have structural and topical integrity which influence reading comprehension, yet we assess reading comprehension using short bits that rarely approximate authentic text.

Inference is an essential skill for comprehending words, sentences, paragraphs, and entire texts, yet many assessments rely primarily on literal level questions.

Prior knowledge and inferential thinking work together to help the reader construct meaning from the text. Because these attributes vary across individual (and within individual from one situation to the next) and because texts may invite many plausible interpretations, we would expect many possible inferences to fit a given text or a question. Reading comprehension, however, continues to be assessed using multiple-choice items with only one correct answer.

To accomplish the goals of reading, readers must orchestrate many so-called skills, yet many of our reading assessment schemes fragment the process into discrete skills, as if each was important in its own right.

Flexibility--the ability to monitor and adjust reading strategies to fit the text and the situation--is one hallmark of an expert reader, yet we seldom assess how, when and why students alter their approaches to reading.

The acid test of learning from text is the ability to restructure and apply knowledge flexibly in new situations, yet our assessment schemes rarely ask students to do so. Instead, we seem to be comfortable with tasks that seldom go beyond restating textual information (p. 7).

It is then an interactive, constructive model of reading upon which the Reading Section of the IGAP was developed and is based.

Development. Initial development of the IGAP began in 1985, when a state education committee was given the task of clarifying the outcome statements found in the Illinois State Goals for Learning. These goals outlined what Illinois students are expected to know and be able to do as a result of schooling. The goals addressing reading were drawn from an interactive model of reading and are specified as follows:

As a result of their schooling, students will be able to read, comprehend, interpret, evaluate, and use written materials.

Students should be able to:

Figure 7.1

CONSTRUCTING MEANING SAMPLE ITEMS

Next, you will read a passage and answer some questions about what you have read. The questions you will answer will have 1, 2 or 3 right answers. You may look back at the passage to help you answer the questions. Do not begin until your teacher gives you directions and tells you how to mark your answers.

PRACTICE

Marie was cold and tired, but she wouldn't give up. Her brother had dared her. He had said she would never finish the bicycle race, but she would show him! Besides, her parents would be so proud of her. She remembered how hard the last two races had been. In one she'd had a flat tire, and in the other she had fallen off her bike. It wouldn't happen this time. As she saw the finish line ahead, she held her breath and pedaled harder. It didn't matter if she won; she just wanted to cross the finish line.

- | | |
|--|---|
| 16. Why did Marie want to finish the race? | 17. Who dared Marie to finish the race? |
| A. She wanted to prove that she could. | A. Her best friend |
| B. Her brother would give her a new bike if she won. | B. Her brother |
| C. Her brother had dared her. | C. Her sister |
| D. She wanted to please her parents. | D. Her father |
| E. She had to prove that she could win. | E. Her teacher |

Valencia, S.W., Pearson, P.D., Reeve, R., & Shanahan, T. (1988).

Illinois Goal Assessment Program: Reading (Grade 6).

Springfield, IL: Illinois State Board of Education.

- o Recognize, recall, and summarize information from material read.
- o Generate questions and predictions and give rationales for each prior to, during, and after reading.
- o Understand the various purposes for reading and identify text to accomplish each purpose.
- o Be sensitive to difficulties of the text, requirements of the task, and their own abilities and motivation.
- o Draw inferences appropriate to achieving a full understanding of the text.
- o Integrate information from more than one text.
- o Justify and explain answers to questions about material read (IGAP Technical Manual, 1988, pp.7-8).

Using these goals, passages were selected that presented information in a coherent manner and reflected the levels of complexity, topic relevance, and length and difficulty found in grade-appropriate materials. To meet these criteria, the passages were complete, authentic texts found in school-based reading materials. A semantic map (Pearson & Johnson, 1978) of each passage was constructed as a check on structural integrity and readability and to provide a guide for the development of test items.

For each passage items were generated to measure students' ability to construct meaning. The items were of three different question types: textually explicit, inferential, or transfer/application (see Figure 6.1). Textually explicit items draw directly from the text and require little inferencing by the reader. Inferential items require the reader to draw an inference across the text or between the text and his/her background knowledge to respond to the item. Transfer/application items require the reader to solve a problem not discussed in the text using information derived from the reading passage. The constructing meaning items were selected using the following criteria:

- o item content reflected the semantic map,
- o focus of the item reflected the central purpose of the passage, and
- o each item score correlated with the aggregate of all 15 constructing meaning items at a level of .3 or higher (IGAP Technical Manual, 1988).

Four different item formats were also developed. The first format used the traditional multiple choice format with a single correct answer. A second item format used multiple choices but required the readers to select as many responses as are appropriate. "The rationale behind such a format is that most questions, particularly inference and application, do have more than one correct answer" (IGAP Technical Manual, 1988, p. 13). The third format required the students to rate every choice for

an item on a scale of "goodness" with 2 = really good answer, 1 = an OK, on-the-track answer, and 0 = an off-the-track answer. The fourth format presented students with a list of 20 questions and asked them to select the ten questions which they judged would help determine how well a person had understood the passage. Responses were compared to those of "experts" with a response receiving one point if it matched the experts and zero points for a mismatch.

The passages, test items, and item formats were piloted. Six passages were selected for each grade level assessed (Grades 3, 6, 8, and 11), 15 items were selected for each passage, and the multiple right-answer format was selected. This format was selected because: a) the correlation of this format with a standardized test of reading comprehension did not vary significantly from the correlation of the single right-answer format, b) the format functioned equally well across grade levels, and c) the format modeled classroom discussions and permitted the most realistic presentation of inferential and application questions (IGAP Technical Manual, 1988).

While most tests of reading achievement contain only one section consisting of short passages and questions to answer, two sections in addition to the Constructing Meaning section were developed for the IGAP. Based on the research addressing the importance of activating and integrating background knowledge (e.g., Anderson, 1984; Anderson, Schallert, Goetz, 1977;), a section called Topic Familiarity was developed. This section was designed to find out how much students know about a topic before they read the passage and to serve as a means for activating students' background knowledge about the topic of the passage. The item format for this section consisted of the presentation of the topic the students would read, followed by 15 statements related to the topic (see Figure 7.1). Students were asked to judge the likelihood that the content of each statement would be included in the passage using the scale of "Yes," "Maybe," and "No."

The Reading Strategies section was designed to measure students' metacognitive strategies related to reading. Using scenarios in which the students are presented with a hypothetical problem related to understanding the information or identifying key information from the passage, students were asked to make judgments that required them to be aware of and judge the usefulness of cognitive strategies related to reading. Hence, this section provided a measure of cognitive and metacognitive strategies related to reading.

Both the Topic Familiarity and Reading Strategies sections were piloted, resulting in a selection of 15 items for each passage in the Topic Familiarity section and a selection of two scenarios with five items each for the Reading Strategies section (See

Figure 7.2).

In the development of the IGAP the sections on topic familiarity and reading strategies were conceptualized not as direct reading achievement measures, but to be used as general categories which help to contextualize and explain performance on the constructing meaning measure.

A fourth section was developed for the IGAP, a section which inventoried the students' literacy experiences, habits, and attitudes both in-school and out-of-school. Since data from this section will not be presented in this paper, the development and characteristics of this section will not be discussed.

Characteristics of the IGAP. The IGAP can then be characterized as a measure of reading that reflects current research and theoretical model development in the field of reading. Unlike the ITBS which emphasizes an individual student's achievement in terms of reporting results, the IGAP stresses measurement at the school and district levels. No individual student profiles are provided from this assessment.

The IGAP consists of four sections, three of which are discussed in this paper: Topic Familiarity, Constructing Meaning, and Reading Strategies. As discussed earlier in this paper, items for topic familiarity, constructing meaning, and reading strategies were constructed for each passage. For this project six passages from the sixth grade level were selected, including three narrative passages and three expository passages.

For Topic Familiarity, each item is scored on a three point scale. Two points are given if the student response (i.e., "Yes," "No," and "Maybe") matches the key. One point is given if the student response is within one option of the key. Zero points are assigned if the selected option is more than one option away from the key. Using this item scoring, a Topic Familiarity raw score is generated.

For Constructing Meaning, each item score ranges from 0 to 1 with 0 indicating that a student selected all possible correct options and no incorrect options and 0 indicating that the student selected all possible incorrect answers and no correct answers. This scoring procedure results in partial credit for correct options even though the student may have chose some incorrect options. The scores on the 15 constructing meaning items are totaled to generate a Constructing Meaning raw score.

For Reading Strategies, the same scoring as for Topic Familiarity is used. A Reading Strategies raw score is generated.

Since students taking the IGAP in Illinois completed only one of the six passages at each grade level, the passages were equated

and scores were transformed to normalized scaled scores with a mean of 250 and a standard deviation of 100 for each grade level.

Reliabilities in the sixth grade Illinois norming sample (measured by co-efficient alphas) and based on the administration of two passages were .89 for constructing meaning, .61 for topic familiarity, and .64 for reading strategies. Measures of both concurrent and construct validity were generated. For concurrent validity the correlation between the Stanford Achievement Test and the IGAP was determined using an equating sample (Grade 6 = .63). Construct validity was determined by factor analysis which revealed a four-factor solution with one comprehension factor containing both the constructing meaning and topic familiarity items, two reading strategies factors, and a fourth factor on which the literacy experience items loaded.

II. THE STUDY

For this study, the student learning as measured by the ITBS and the IGAP in two schools participating in the staff development will be compared and then contrasted to student learning in a contrast school whose teachers did not participate in the staff development. The two staff development schools, A and F, were the same schools discussed in the previous chapters.

Participants

In the staff development schools, grade 4, 5 and 6 teachers participated in the staff development and the pretesting and post testing using the student learning measures. In addition, an LD teacher in each school was involved in the staff development. In School F, the curriculum specialist attended the sessions, and in School A the principal attended from time to time. Pretest and post test student learning measures were collected for five teachers in School A and four teachers in School F. In School B, the contrast school, eight 4, 5 and 6 grade teachers participated in the testing.

Two samples of students participated in the research. A large sample of students participated in the norming study, while a subsample of these students participated in the effectiveness study. For the norming study, 787 students in grades 4, 5, and 6 were tested during the Fall of 1988. This sample served as a comparative norming sample for the IGAP, since the IGAP was originally standardized in Illinois on students in grade 6. For the norming study, the assessment was administered not only to students in grades 4, 5, and 6 in these three schools, but also to students in two additional participating schools. Student characteristics are presented in Table 7.1.

The subsample of students participating in the effectiveness study consisted of students who completed the ITBS and the IGAP

TABLE 7.1

Student Characteristics of the Norming Study

Characteristics	Grade			Total
	4	5	6	
Number of Students	296	251	240	787
Sex: Male	143	115	116	374
Female	56	138	119	413
School: A	41	46	43	130
B	58	40	65	163
C	72	50		122
D	103	87	102	292
F	23	26	31	80

TABLE 7.2

Student Characteristics of the Effectiveness Study (n=276)

Characteristics	Grade			Total
	4	5	6	
Number of Students	91	80	105	276
School A (Staff Dev.)	29	31	32	92
School F (Staff Dev.)	17	17	23	57
School B (Contrast)	45	32	50	127
Sex: Male	42	32	54	128
Female	49	48	51	148

TABLE 7.3

Means and Standard Deviations for the Scaled Scores on the IGAP by Grade Level for Norming Study

Reading Activity	Grade		
	4	5	6
Topic Familiarity	230.57 (80.32) (n=296)	253.22 (77.74) (n=251)	278.50 (82.54) (n=238)
Constructing Meaning	212.09 (79.30) (n=284)	260.71 (92.61) (n=249)	293.30 (87.36) (n=234)
Reading Strategies	233.03 (77.72) (n=272)	251.00 (85.06) (n=200)	275.68 (90.47) (n=232)

during the pretest and post test administration times and who were in classrooms of the participating teachers in the two staff development schools or the contrast school. Student characteristics for the 276 students participating in the effectiveness study are presented in Table 7.2.

Data Collection and Scoring Procedures

Two measures of students' learning were collected at pretesting and post testing, the ITBS and the IGAP. The ITBS was administered by the school district as part of their annual assessment program. For pretesting, these data were collected in the Spring of 1988 and again a year later for post testing. The IGAP was administered by project staff in the Fall of 1988 and again in the Spring of 1989. Like the ITBS, this assessment was group administered to entire classes. Three forms of the assessment were available and equal numbers of each form were given in each class.

During the fall administration students read and responded to two passages, one narrative and one expository in text structure. They also responded to the literacy survey. During the fall administration students participated in two one-hour assessment sessions. During the first session the assessment was explained to the students and they completed one passage. During the second session (completed the following day) the students read and completed the assessment activities associated with the second passage and completed the literacy survey.

During the spring administration students completed only one passage in one testing session. Students who completed both the ITBS and the IGAP during the Fall and Spring administration in the staff development and contrast schools (n=276) served as the subjects for the effectiveness study.

Project staff were trained in the administration of the IGAP, and a standardized script was used to facilitate consistency. Both the ITBS and the IGAP were machine scored and scores for each student were automatically transferred to data files which were used for the analyses.

III. RESULTS

Norming Study

Since the IGAP was normed in Illinois with sixth grade students, a small-scale local norming study was conducted using the data collected in the Fall of 1988. The study was conducted to determine: a) if the IGAP was developmental across grades 4, 5, and 6, and b) if the concurrent validity of the IGAP and the ITBS for each grade level was comparable to that found with the Illinois norming sample and the Standard Achievement Test. If

these criteria were met, then support would be evident for the use of the test with the Tucson students participating in the project.

One criterion addressed the developmental nature of the test across the grade levels. If the test is developmental, students in grade 6 should receive average scaled scores higher than those in grade 5, and the average scaled scores in grade 5 should be higher than those in grade 4. Table 7.3 presents the means and standard deviations for the scaled scores on the three reading activities assessed. Both visual and statistical analyses of the data support the developmental trend across the three grade levels. Analyses of variance across grades revealed a significant effect for grade on topic familiarity, constructing meaning, and reading strategies.

A second criterion addressed the concurrent validity of the IGAP for this norming sample. The correlations for each grade level between the IGAP and ITBS Reading portion were compared with the correlations for the Illinois sixth grade norming sample between the IGAP and the Standard Achievement Test. Table 7.4 presents the intercorrelation matrix for the three activities on the IGAP and the ITBS Reading. The correlation between Constructing Meaning on the IGAP and the Reading portion of the Standard Achievement Test is reported for the sixth grade Illinois sample as .63 which is comparable to the correlations for Constructing Meaning and the ITBS Reading portion for the three grade levels in the norming study (Grade 4 = .53, Grade 5 = .60, and Grade 6 = .58).

Results of the norming study provide support for the use of the Reading portion of the IGAP as a measure of reading achievement. Both the developmental criterion and the similar concurrent validity criterion were met. Based on the theoretical framework of the IGAP, we hypothesized that this assessment instrument would be more sensitive to the effects of staff development than the ITBS.

Effectiveness Study

One means of determining the effectiveness of staff development has traditionally been based on student learning measures, particularly standardized instruments (Brophy & Good, 1986; Hoge & Coladarci, 1989). Student performance on the three sections of the IGAP and the Reading portion of the ITBS were used in this project to measure student learning. In the analyses, student performance in each staff development school was compared to student performance in the contrast school. The staff development schools were separated for these analyses because of the evidence supporting the notion that the school cultures and implementation of the staff development process varied for each school.

TABLE 7.4

Intercorrelations for the ITBS and IGAP for the Norming Study

Grade 4	1	2	3	4
1 ITBS Reading				
2 Topic Familiarity	.38			
3 Constructing Meaning	.53	.49		
4 Reading Strategies	.34	.37	.47	
Grade 5	1	2	3	4
1 ITBS Reading				
2 Topic Familiarity	.46			
3 Constructing Meaning	.60	.58		
4 Reading Strategies	.39	.42	.57	
Grade 6	1	2	3	4
1 ITBS Reading				
2 Topic Familiarity	.21			
3 Constructing Meaning	.58	.45		
4 Reading Strategies	.39	.29	.39	

TABLE 7.5

Adjusted Means and Standard Deviations for Student Performance
On The Reading Portion of the ITBS and the IGAP

Test	Staff Development School		Contrast School School Z
	School A	School F	
ITBS: Reading	42.05 (20.1)	50.6 (24.8)	47.05 (25.5)
IGAP			
Topic	276.64	280.11	271.77
Familiarity	(97.0)	(93.0)	(92.3)
Constructing	256.16	282.40	251.15
Meaning	(102.4)	(102.7)	(101.7)
Reading	286.28	293.28	249.28
Strategies	(98.0)	(105.9)	(107.9)

In the statistical analyses, scores on the pretest were used as covariates in separate analyses of covariance which compared student performance among the three schools for the normalized curve equivalent scores on the Reading portion of the ITBS and the scaled scores on the three sections of the IGAP.

Adjusted means and standard deviations for student performance and the four dependent variables are presented in Table 7.5. Statistical analysis of the Reading portion of the ITBS indicate that no differences were evident among the three schools for their performance on the ITBS $F(2,257) = 1.098$ when their previous year's performance on the test was used as a covariate $F(1,257) = 295.46, p < .001$.

In contrast to the ITBS, the Reading section of the IGAP appears to be more sensitive to the staff development. Student performance on the three sections of the IGAP varied. For Topic Familiarity, no differences among the three groups were evident, $F(2,271) = .02$ when student performance on the fall administration of Topic Familiarity was used as a covariate, $F(1,271) = 27.693, p < .001$. However, differences among the three schools were evident in their performance on the Constructing Meaning section, $F(2,261) = 3.423, p < .03$, with a significant effect for student scores on the fall administration of Constructing Meaning, $F(1,261) = 223.497, p < .001$. Post hoc analysis (Tukey pairwise comparisons) using the adjusted means indicate that differences in performance were evident ($p < .05$) between the contrast school and staff development school F with the staff development school scoring significantly higher. For the Reading Strategies section, the main effect for school was also significant, $F(2,243) = 5.006, p = .007$, with a significant covariate $F(1,243) = 32.687, p < .001$. Post hoc analysis using pairwise comparisons indicate that differences were evident between student performance in both of the staff development school and the contrast school with the staff development school scoring higher.

IV DISCUSSION

This paper described an analysis of students' learning as it relates to a staff development process designed to introduce research-based understandings of reading comprehension, particularly from an interactive perspective. The approach was designed to elicit the participating teachers' value, empirical, and situational premises and discuss them in relation to research on reading comprehension. Traditionally, student learning has served as a critical measure for the effectiveness of staff development and teacher inservice programs (see Brophy & Good, 1986 for a review). Much of the process-product literature has focused on the link between teacher behavior and student achievement. While evidence from experimental studies supports a

causal relationship between a number of teaching behaviors and academic achievement (e.g., Anderson, Evertson, & Brophy, 1979; Good & Grouws, 1979; Stallings, 1975), limited research has investigated such a causal relationship for staff development models that focus directly on influencing teacher beliefs and related practices.

Speaking broadly, the results of the effectiveness study support change in terms of student learning and corroborate the findings in the other two papers. But this broad interpretation of change must be viewed more closely.

First, it is both important and interesting to note that no differences were evident among the schools on the ITBS. This test by design is built upon a subskill theory of reading and is not well matched with the interactive reading orientation apparent in the staff development. In designing this project, we questioned the sensitivity of this school administered instrument and its relevance to current theories in reading and reading comprehension. Consequently, we sought a second instrument, the Reading portion of the IGAP. This is one of several instruments being developed to better fit current research in reading. The results of the effectiveness study support our hypothesis that the IGAP was more sensitive to our staff development than the ITBS.

Second, the results suggest that students in both staff development schools were better able than students in the contrast school to demonstrate their use of reading strategies. Richardson and Anders (1990) and Hamilton (1989) note that analyses of teacher change in both beliefs and practices indicate that teachers in School A changed as much as teachers in School F. In both the beliefs and practices, change was toward more interactive instruction focusing on the modeling and discussion of cognitive and metacognitive reading strategies.

Third, it is interesting to note that only students in School F, the school where the staff development was perceived as "working," showed higher scores than the contrast school on the Constructing Meaning section of the IGAP. For students, this section of the IGAP probably created the most tension, because they were given the opportunity of selecting more than one option for each item. It is interesting to note that in School F teachers reached the empowerment stage within the staff development process more quickly and that discussion and disagreements were handled with less tension. Although we can only speculate, one might hypothesize that in School F, this context for flexibility and discussion transferred to classroom reading practices which in turn reduced the novelty of the Constructing Meaning section. Further analysis of the videotaped classroom reading lessons with an eye toward flexible thinking and discussion would seem warranted.

Fourth, no differences were evident among the three schools for student performance on the Topic Familiarity section of the IGAP. This finding was surprising, for use of a number of schema activation activities were topics of discussion during staff development. However, in the current use of the IGAP this section has not been used as an outcome measure, but as an activity for activating background knowledge for the topic of the passage before the students read it during the Construction Meaning section and to determine how much students know about the topic before they read. Comparing correlations between Topic Familiarity and Constructing Meaning for the fall and spring administration of the IGAP indicate that the correlations were higher for the spring administration in the staff development schools providing some evidence of either increased background knowledge or increased ability to activate that knowledge.

The staff development process implemented in this project does not lend itself to typical student outcome measures. The model encourages empowerment, diversity, and flexibility, aspects that are difficult to measure using standardized, group administered student assessments. Like others in the field of reading (Pearson & Valencia, 1987; Johnston, 1983; 1984), we encourage the further development of assessment models that capture the complex, holistic nature of the reading process and highlight the active and flexible characteristics of readers.

CHAPTER EIGHT

CONCLUSIONS

I. THE STUDY

The ability to comprehend the written word is a fundamental requirement for success in mainstream U.S. culture. Because of its contribution to a successful life, the ability to read is usually viewed as the most important skill that is directly taught in elementary school. A student's failure to learn how to read greatly reduces his/her life chances; and since society expects all students to learn how to read in school, such a failure is directly attributed to our schools and its teachers.

Recognizing the importance of the teaching of reading comprehension, a number of funding agencies, including the federal government, have supported research on how children learn to read, and how reading comprehension is and should be taught. Schools and teachers, however, are still viewed as failing our students in the area of reading comprehension. One hypothesis is that teachers resist change, and therefore have neither paid attention to this research nor altered their practices in directions suggested by the research. It is this hypothesis that was examined in the three-year project described in this report.

In order to address this issue, our study combined three very different approaches to inquiry: analytic, in the study and categorization and assessment of the literature; basic descriptive research in the study of classroom practices, teacher beliefs, and school context; and action research in the development, implementation and testing of the school-based staff development program. The study also operated at several levels within the schooling system. At one level, it examined the nature of reading comprehension in the literature, and in the minds and practices of individual grade 4, 5 and 6 teachers. At a more global level, the study investigated the larger context in which the teaching of reading comprehension is considered: the norms of teachers in particular schools, and the testing culture that governs society's understanding of the success of schools and teachers. And third, the study examined teacher change in general and as a result of a particular approach to staff development that took into account the understandings acquired at the previous two levels of research.

The methodology could be described as eclectic. It involved ethnographic school context studies and belief interviews, open-ended narrative observations and the development of analyses systems that were based on the data and not predetermined. It also employed a multiple-choice survey, examined student scores

on several standardized tests, and performed relationship studies. It was, perhaps, dominated by a qualitative approach to educational inquiry. The sample size was small and the study focussed largely on the meaning that the participants, in this case 39 grade 4, 5 and 6 teachers, bring to their teaching of reading comprehension. However, methodology, particularly for an action-research project, should be selected on the basis of the questions asked. In this case, several questions also required a quantitative approach to research, thus our methodological approach shifted when we looked at the relationship between the staff development process and student achievement.

This chapter will summarize our responses to the five questions asked three years ago in our proposal to the U.S. Department of Education. It will also address what we have learned about teacher change, the process of staff development and, finally, the relationship between research and practice.

II. RESPONSES TO THE RESEARCH QUESTIONS

1. What are the Research-Based Teaching of Reading Comprehension Practices?

The first issue we confronted in addressing the hypothesis that teachers don't use current research in reading comprehension was to determine what the research-based practices are that teachers are supposedly not using. Identifying these practices involved conducting a massive literature search in which we worked with literature reviews and syntheses of reading comprehension research, as well as original sources.

This process led to the identification and categorization of a large number of researched instructional practices and their theoretical underpinnings. For each practice, confidence ratings were assigned concerning the quality of the research and the potential for implementing the practice. The confidence ratings included an assessment of the context to which the research could be generalized: that is, the type of student, grade level, and our sense of the practice "working" in a classroom such as the ones we were studying in this project and our own classroom experiences.

These practices were used by the staff developers in the staff development processes: at times, the staff developers talked with the teachers about the practices, and, more rarely, teachers would request copies of the articles describing the testing of the practice.

In our attempt to provide the teachers with the range of possible practices from which they could choose those to explore in depth, we prepared a list and description of the various practices (see Appendix A). The teachers seemed to resist selecting practices,

and the reason for this 'resistance' relates to the form in which the information was presented, both in the list of practices and in the research reports themselves. The material was context free. Issues important to teachers were seldom discussed in the material; issues such as how to organize the classroom, how to work with students having difficulty with the practice, how to fit the practice into the larger curriculum, etc. Thus, the material did not make much sense to them as they contemplated the day-to-day life in their classrooms.

The material was, however, very important for the staff developers who found a content base for their staff development program in the practices extracted from the literature. We, therefore, concluded that a translation process is necessary for the research as provided in the numerous syntheses and original sources. This translation process would involve an individual, such as a staff developer, who could help teachers understand the practices within the context of their own classroom, or the development of cases of teachers using the practices (Carter and Richardson, 1988). Such cases would envelope the practices within classroom issues of concern to teachers. In addition, those practice-oriented scholar-writers whose audience is classroom teachers should provide context information to guide teachers toward empirically-based practices.

2. To What Degree are Teachers Using Research-Based Teaching of Reading Practices?

In addressing the second question, we adopted a narrative observation approach that described what teachers in our sample were doing when they said they were teaching reading comprehension. We also videotaped a smaller group of teachers as an element of the staff development program. We were then able to analyze their practices using the system developed to categorize the practices in the literature review.

We found that teachers were using a large number of research-based practices, but that many of these practices were being used because of their inclusion within a particular basal series. Many teachers were moving in a lock-step pattern through the basal. However, as indicated by a closer look at these practices in the videotapes, the implementation of many of the practices seemed superficial at best.

The domination of the basal and its workbooks, the practice of asking students to read aloud in a round robin manner, the lack of consideration given to students' background knowledge and the teaching of vocabulary out of the context of the text suggested that many of the teachers had not integrated recently articulated schema and whole language theories into their beliefs and practices. Analyses of the belief interviews, described in Question 3 below substantiated this suggestion.

3. What Are the Barriers to the Use of Research-Based Practices?

This question involved investigating two potential barriers and, in the course of conducting the staff development, we discovered a third.

The first to be explored was teacher beliefs. As mentioned above, much of the current research is based on schema theory, and its underlying assumption holds that reading is an interactive process in which meaning is constructed by the reader. Many of the teachers came through the educational system, including teacher education, in an era in which reading was viewed as the employment of a number of skills which led to the reader comprehending the words, then sentences and finally ideas as the author meant them. These two views constitute significant paradigmatic differences. Our sense was that teachers with beliefs from the second paradigm would have difficulty understanding, accepting and implementing practices based on the first.

To examine this issue, we conducted belief interviews to determine the theoretical positions of the teachers with whom we were working. We allowed the theories to emerge from the data, and were able to place each teacher in one of four theory spaces. It turned out that one quadrant or theory space related to the second paradigm in which reading relates to the understanding of words added together, and meaning is in the written work. The second quadrant related to a structuralist, literary view that meaning is in the text, and the purpose of reading is to determine what the author meant. The third quadrant could be associated with the whole language psycholinguistic view that suggests that children learn to read by reading authentic literature and meaning is constructed by the reader. The fourth quadrant did not relate to any extant reading theory: reading is the application of a number of skills based on the understanding of words added together; however, the reader constructs meaning.

Most of the teachers in the sample were located in the first quadrant at the beginning of the project; that is, the theoretical framework that suggests that reading is the employment of skills related to understanding words, and that the purpose of reading is to determine exactly what the author or text means. Some teachers held different views of the reading process, depending on the purpose of functions of reading: meaning may be constructed in literature, but not science or social studies which (in the teachers' views) requires literal, factual and accurate reading. One would assume that such teachers would have difficulty understanding or accepting current practices based on schema theory, the structural literature approach or whole language.

What this suggests is that a change process needs to work with more than classroom activities. Theory is extremely important in the implementation of change, both the theory or paradigm in which the research itself is embedded, and the theories of reading that guide teachers' classroom actions. The staff development process which was developed and implemented in this project was based on this assumption.

The second potential barrier to teachers' use of research-based practices relates to school context. Much of the recent work on the organization of schools suggests that certain organizational features relate to both school effectiveness, as measured by student performance on standardized tests, and to the willingness and ability of school personnel to change and improve. One would assume, therefore, that information concerning these features would be important understandings for staff developers who are attempting to help teachers undertake a change process.

In this study, we relied on two sources for such understandings: a survey of all faculty members in all six schools that was based on current research on school organizations; and ethnographies of the schools based on many hours of observations and informal and formal interviews.

The results of both procedures indicate the benefits of multiple sources of information. The interpretation of the survey suggested that neither School A nor F would be ideal environments for the type of staff development planned, since faculty in both schools reported that they were isolated from frequent contact with others. The survey also indicated, however, that School F teachers felt more disempowered concerning school decision-making and goals, suggesting that School A would possibly move faster in the staff development process. The ethnographies, however, uncovered social norms in School A that probably impeded the staff development process. Teachers in School A were aware of major differences among teachers in terms of philosophy and teaching practice in reading comprehension. They, therefore, did not talk to each other about classroom practices and their justifications, but were socially collegial; and thus had difficulty adjusting to the staff development. Teachers in School F had not developed such norms. They were quite isolated from each other both socially and pedagogically. They were quite comfortable, then, with the staff development process that asked them to talk about practices and beliefs. Thus school norms that govern teacher interaction with other teachers can be powerful inhibitors to school-level critical inquiry processes.

But there were norms common to both schools that seemed to govern the discourse in the staff development sessions, a discourse that was quite different than that at the individual level. At the group level, teachers focussed on systemic barriers and mandates

that caused them to institute practices over which they had no control, and of which at least some of them disapproved. For example, basal readers were used extensively in the two schools. Their use was justified in one school on the basis of a supposed school board policy that 80% of reading instruction had to be in the basals, and in a second school, on the basis that there were no other books to use.

It appears, then, that the shared language for justifying or explaining a practice at the school level revolved around barriers, mandates, and lack of control, even though teachers often expressed different personal justifications for the given practice in their individual sessions. The general feeling of lack of control and autonomy may, in part, function to maintain a laissez-faire approach to teaching activities within a collective of teachers.

The third barrier that was uncovered during the course of the staff development process related to the testing culture. Our understanding of the effects of testing on teachers' beliefs about instruction was gained during the staff development. We found that teachers in Schools A and F had difficulty approaching the topics of current research and practice in reading comprehension without expressing their anxiety about how it would be assessed. In the topic analyses of the staff development sessions that were described in Chapter 6, approximately 20% of the time in the group sessions was devoted to issues surrounding grading, testing and assessment (Anders, Richardson & Morgan, 1989). Such discussions were not initiated or supported by the staff developers who felt that the content of the sessions should be related to the teaching of reading comprehension rather than its testing.

Embedded in the teaching of reading, of course, is an on-going process of assessment: the teacher asking 'How is this going? What activities or materials would be more interesting or instructive?' However, little credence was given to these measures; rather concerns surrounding products--the standardized test and the letter grade--were of primary concern.

While the cultures in the two schools differed in a number of ways, as did the two principals' beliefs and actions, the teachers in both schools approached the topic in similar ways. They saw grading as controlling their's and their students' performance, and as governed by demands of parents and school board members and others for "objective" norm-based grading systems. While they reified standardized tests, they questioned their validity; but were extremely insecure about their own ability to judge students.

This study suggests inherent contradictions between what a teacher is required to do and his/her own values, and that these

contradictions are pervasive. As Richardson (1990) pointed out: "Low grades and concepts such as standardized tests are antithetical to sound pedagogical principles that suggest that students should be provided with success experiences" (p. 63). It seems that the culture of testing is presently overruling the best of intentions and that the influence of that culture may need to be addressed for teacher changes in beliefs and practices to occur. Thus, a barrier that is limiting teachers use of research-based practices emanates from beliefs that overgeneralize psychometric principles--principles that are often misunderstood by educators and lay people alike.

4. Can a School-Based Staff Development Model Affect Teachers' Use of Research-Based Instruction of Reading Comprehension?

The staff development process was based on the assumption that changes in teaching practice required consideration of teachers' beliefs. As determined from the belief interviews, many of the teachers in our sample held theories more conducive to a skills-based program. And yet, the theories that undergird most of the current research in the instruction of reading comprehension is cognitive schema theory or constructivist. Thus, it was assumed that simply talking about current research-based practices to these teachers would lead to misimplementation or no implementation at all. Further, as mentioned above, research-based practices as described in the literature are context-free; they may not be appropriate for the classrooms of the teachers with whom we were working. The staff development was therefore designed to help teachers examine their beliefs and practices, and to suggest alternatives in the form of research-based practices with which they could experiment in the classroom.

Fenstermacher's (1986) concept of practical arguments was helpful to us as we planned the staff development. It both acknowledges teachers' empirical, value and situational premises and asks that they be articulated, and suggests that alternative premises may be entered into the conversation by a knowledgeable "other".

The staff development was implemented in three schools, and the process involved working with individual teachers and with groups of grade 4, 5 and 6 teachers in each school. The process is thoroughly described in Chapter Six.

We found that teachers changed their beliefs during the staff development program, in general, toward positions that would support more current research and practice. They also changed their practices. When asked about the staff development program, they talked about the sense that the staff development freed them to question their current programs which were contained within basal readers, and to reach for a more valid concept of reading and therefore a more useful reading program.

It should also be pointed out that in one of the schools in particular, the process was not easy to implement. There seemed to be considerable trauma and anger toward the staff developers for instituting a staff development program in which teachers were asked to talk with each other about their beliefs and practices, and take control of and responsibility for the process. There was considerable tension between the teachers who wished the staff developers to tell them about new practices, such as happens in most staff development programs, and the staff developers' attempts to institute a type of critical inquiry process that focussed on the teachers' beliefs, understandings, and directions for change.

Nonetheless, the empowerment stage was reached in all schools. In fact, teachers in the school that took the longest to reach that stage (School A) began working together the next year to become a site-based managed school without the official sanction of the school district.¹⁸ It can be concluded that the staff development process was a powerful force in the lives of the teachers and students in the three schools.

5. Does the Use of Research-Based Teaching of Reading Comprehension Practices Affect Student Reading Achievement in a Positive Direction?

Currently in the state of Arizona, the Iowa Test of Basic Skills (ITBS) is used to assess student achievement on a yearly basis. However, given the nature of the current research on reading comprehension, we found it necessary to investigate measures of achievement in reading comprehension that differed from such standardized tests as the Iowa which is based on a different conception of reading comprehension. We were pleased to be able to use the Illinois Goal Assessment Program, Reading portion, because it is based on the current cognitive research and models of the reading process. In that the content of the staff development process was, in part, current research on reading comprehension, we felt that if it were to impact student achievement, the impact would be demonstrated on a theoretically consistent measure of an interactive view of reading that undergirds so much of the current research.

We, therefore, were able to collect both types of scores: the Iowa scores that the districts automatically collect for each student, and the IGAP responses of the students who were in the classrooms of teachers involved in the study.

¹⁸ Several teachers stated that they would have more control and autonomy if the school did not become one of the school district's official experimental site-based managed school.

The scores of students in schools with teachers who had participated in the staff development process were compared with those of students in schools with teachers who had not.¹⁹ We found no differences evident among the schools on the Iowa test. However, we did find that students in both staff development schools (A and F) were better able than students in the contrast schools to demonstrate their use of reading strategies. Further, students in School F, the school in which the teacher participants reached the empowerment stage quickly, showed higher scores than the contrast schools on the Constructing Meaning section of the IGAP.

We were not surprised that there were no differences in the Iowa scores, since the theoretical base of the Iowa test relates to a subskill view of reading. The theories and practices that were discussed in the staff development sessions related more to an interactive and constructive view of reading. These results indicate that it is extremely important to select measures that not only match the content of instruction, but also match the theoretical bases of the conception of the content of instruction.

III THE ROLE OF RESEARCH IN CHANGING IN TEACHING PRACTICE

Our experience with this project has pushed us toward reconceptualizing teacher change and the role of research in the teaching practice.

Teacher Change²⁰

The teachers in our study changed practices all the time, and they often were able to articulate purposeful reasons for so doing. Most changes that we observed would fit into Cuban's (1988) notion of first-order change; changing the number and composition of reading groups, trying a new activity, creating several learning centers for students who have completed their work, emphasizing writing activities more than the previous year. One teacher was undergoing a more fundamental second-order change by adopting the whole language philosophy, which was slowly affecting her classroom practices.

Changes that were adopted and tried out in the classroom were often dropped if they didn't "work" for that teacher. "Working" for the teachers in our study mean that the activities did not violate the teacher's beliefs about teaching and learning; they

¹⁹ All teachers eventually participated in the staff development.

²⁰ These next sections are adopted, in part from Richardson (1990b).

also engaged the students, permitted control over students felt necessary by the teacher, and helped teachers respond to system-level demands such as high test scores. The rationale for an adopted research-based activity was seldom related to the original scholarly theory. For example, the rationale for asking students to read the comprehension check questions before reading a passage was expressed consistently as making sure the students got the right answers and did better on the tests, rather than a theoretical rationale derived from schema theory.

The filtering of a research-based practice through the teacher's personality and/or belief system seemed to alter the practice quite dramatically, such that it could no longer really be viewed as the same practice. For example, we have videotapes of two teachers implementing prereading activities: previewing the pictures in a text to hypothesize what was going in the story. Teacher Cf performed in a manner suggested in the literature. Teacher Cg's performance was quite problematic because she let students know, with her feedback to their responses, that they were making errors in their picture reading.²¹ The correct answers were, of course, obtained from the piece of literature that the students had not yet read, but she had. When asked why she did picture previewing, Teacher Cf stated that she had been told once that you should, and she had always done it. Teacher Cg said that she was trying to get a concept across; she had a vague sense that it was not working but did not know why. We knew the teachers quite well through their belief interviews, and the full group staff development sessions. Teacher Cf was non-intrusive, hesitant about judging her students, and looked for the best in each. Teacher Cg had a military background, was rule-bound, and viewed teaching reading as helping students obtain the correct meaning from text. Thus the brainstorming practice was filtered through the teachers' personalities. In one case, the implementation was quite faithful, in the other, distorted.

Teacher Change Through Staff Development

This study suggests that a staff development process that leads to changes in beliefs and practices requires that teachers both own the staff development process and articulate and examine their premises. It also suggests that this process is facilitated by an "other"; someone skilled at the process of

²¹ The purpose of this prereading activity as suggested in the literature is to activate and share students' background knowledge, and develop a set of hypotheses or questions that will focus the students' reading of the passage. It is not expected that the teachers will judge the answers as correct or incorrect at prereading time; in fact, such judgment counteracts the original purpose of the practice.

elicitation of practical arguments and knowledgeable about alternative theories and practices.

Our experience with this project also suggests that the process is not always smooth. School norms seemed to strongly affect the group staff development process, and one school did not reach the empowerment stage until the last session.

Could the process in School A have been less traumatic? A useful framework for understanding what we were trying to do with our group staff development process, and why we had trouble with it, is described by Sirotnick and Oakes (1990) as critical inquiry. They refer to Habermas (1971 & 1979) and Friere (1983) and other critical theorists who develop the notion of critical inquiry at the school level that involves the participants in an examination beliefs and assumptions, with the ultimate goal being awareness, empowerment and change.

Habermas suggests that the ideal conversation in such a process would entail a balance of power among participants of such a conversation. But Friere (1983) addresses the issue of why it is sometimes necessary for an educative intervention to take place, even though it sets up an initial teacher-learner dichotomy, or in our case, an "other" and the teacher/learner. He suggests that such a process requires a "self-effacing" stance on the part of the teacher, such that the teacher is part teacher and part learner. This is similar to Little and Bird's (1983) suggestion that there should be reciprocal learning in an observation/supervision situation, and the supervisor must offer analysis and suggestions in a humble manner.

In addition to being, at times, impatient, and perhaps less than completely humble, we broke two norms of school life. The first relates to what Lortie (1975) described as the individualism norm. This norm implies little reliance on others for sources of knowledge, skills, or experience except during the first two years (Fuchs, 1969). The second norm relates to the expectation for a particular type of staff development process in which the staff developer talks about, perhaps models, a new practice; and the teachers are free to decide whether or not to implement the practice, and if tried, whether or not to continue to use it. Were a new type of staff development program to become the norm, become critical inquiry sessions in which teachers control the process and investigate their beliefs and assumptions, it is our sense that the process would be much smoother, less traumatic and perhaps even more effective than our attempts in this project.

Practice and Research

Our experiences suggest that research-based reading practices in the literature are encompassed within scholarly theoretical frameworks that do not map always or easily onto the ways

teachers think about teaching reading. Few of the teachers in our sample, for example, exhibited a "pure" theory of the learning to read process, a pure theory being one of several theoretical orientations expressed in the literature (Harste, 1985; Richardson & Hamilton, 1988). Teachers' considerations were much broader and more contextual than any of the theoretical orientations can account for. Activities in a classroom appeared as a crazy quilt to the observers, full of actions that did not appear coherent according to any one theoretical orientation. The several self-described whole language teachers who use basal readers were a good example of this.

This issue was also demonstrated as we pursued our staff development program. The practices that emerged from the massive literature search undertaken at the beginning of the study, and described elsewhere (Anders and Lloyd, In Preparation) were categorized and presented to the teachers along with a short document. The teachers seemed to avoid the task of selecting among the focusses, and when asked why, responded that the written material really didn't make sense to them. They needed to know what the "issues" were for each of the focusses. The issues of interest were perceptions of particular students and types of students, to school-level issues such as what the teacher who teaches these kids next year would think of the activity, and to school district level testing issues.

V THE USE OF RESEARCH IN THE IMPROVEMENT OF PRACTICE

This study suggests a somewhat different view of teaching practice, change in teaching practice and the use of research in this process. Research-based practices in the literature, at least in reading, are activities embedded within theoretical frameworks. A theoretical framework in reading, for example, tells us how reading and learning to read are viewed by the researcher (see, for example, Harste, 1985), and therefore how the particular instructional activity contributes to the learning-to-read process. When a teacher employs an activity within a classroom, it too is embedded within the teacher's set of premises, although that framework may not be related to reading and learning to read. It may, for example, be related to classroom management and control or student testing, and to notions of the roles of teachers and students. Thus, the research-based activity and the implemented activity may be called the same thing, and even look somewhat similar, but, in fact, are not the same practices because the activities are embedded in different belief sets, intentions and theoretical frameworks.

This notion of practice as activity embedded within theory is important in thinking about changing teaching practice. As demonstrated above, teachers change all the time. Therefore the problem is not one of change or non-change. It centers on the

degree to which teachers engage in the dialogue concerning warranted practice and take control of their classroom activities and theoretical justifications (see, also, Wildman and Niles, 1987); and that these justifications relate to the socially constructed standards of warranted practice. In our study, the school level culture in both schools that provided justifications for action based on external forces allowed the teachers to ignore questions related to their own beliefs, understandings, and activities. As long as the district imposed the use of basal readers and their workbooks, for example, the teachers did not have to face up to their internal conflict between the sense that basals provide an easy way to plan for reading and maintaining control over students, and the feeling that the basals may not be the best material for teaching reading.

Taking control of one's justifications involves reflection on practices, that is on activities and their theoretical frameworks, and an ability to articulate them to others in a meaningful way. If the misimplementation of practices is to be avoided, a new classroom activity should be introduced to teachers with an opportunity for them to relate the activity's theoretical framework to their own beliefs and understandings.

Research, then, should provide practitioners not just with "findings" in the form of activities or behaviors that "work", but ways of thinking and empirical premises related to teaching and learning. These ways of thinking can be used to heighten teachers' awareness of their own beliefs, provide content for their reflections and help them develop their justifications. A behavior, such as wait time, is not "food for thought"; it is a possible outcome, or one way of implementing several possible theories and intentions that may relate to such concerns as: the nature of teachers' manner in conveying respect for children; the cognitive processes of students as they contemplate high-order questions; power and control issues among students and their teacher; or the social and cognitive importance of classroom conversation. Thus, "wait time" as a finding needs to be embedded within a theoretical framework of importance to teachers and education that will allow them to consider the concept within their own contexts. Wait time may then affect teachers' practices as the concept is filtered through their beliefs, intentions and understandings of context.

Without an understanding of the theoretical framework and the opportunity to talk about how the premises in the theory agree or disagree with the teachers' own premises, teachers may accept or reject practices on the basis of whether they meet the personality needs of the teacher and other more ecologically created concerns such as classroom management (see Doyle, 1987) and content coverage. Teachers then become trapped by their inability to take control of their practices, and instead resort to explanations based on external pressures. Empowerment is

threatened when teachers are asked to make changes in activities without being asked to examine their theoretical frameworks. In fact, teacher empowerment does not occur without reflection and the development of the means to express justifications. Without such empowerment, teachers will continue to be victims of their personal biographies, systemic political demands and ecological conditions, rather than making use of them in the developing and sustaining worthwhile and significant change on the basis of standards of warranted practice.

This perspective on change in teaching practice and the use of research in this process suggests an approach to working with teachers that is quite different than that implied by publications such as What Works (U.S. Department of Education, 1986). It means that opportunities should be created to allow teachers to interact and have conversations around standards, theory and classroom activity. It also suggests that a necessary element of the conversation are discussions of alternative conceptions and activities that, in combination with some teachers' own conceptions, form a view of warranted practice. Research becomes the basis for the development of warranted practices with which teachers may experiment in their classrooms. However, such a process must be implemented in an atmosphere of trust. It behooves us, therefore, to approach with extreme care the development of programs that ask teachers to verbalize their beliefs and premises. Otherwise the research/practice connection will continue to be appropriated by those whose purpose is to control teachers and teaching.

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FINAL REPORT
OF THE
READING INSTRUCTION STUDY

PART II: THE APPENDICES

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A P P E N D I X A

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GUIDE TO CONFIDENCE RATINGS FORMS: SYNTHESSES & REVIEWS

A. Practice

List each practice presented. It may be a general practice such as "pre-teaching vocabulary," or a specific practice such as "Request."

B. Sources

List author and date of each citation used as support for author's conclusions.

C. Theory

Code each citation according to its theoretical base.

1 = None

2 = Decoding/Skills/Behaviorist/Information transfer

3 = Strategies/Schema/Metacognitive/Cognitive/Interactive

4 = Whole language/Psycholinguistics/Transactive

D. QS - Quality of Study

Rating reflects how well the study was conducted.

E. SP - Support for Practice (for data-based, experimental, intervention studies)

Rating reflects how well the results of the study support the practice. How much extrapolation is needed to go from the results of the study to the suggested practice?

F. Inf. - Amount of Inferencing (for descriptive studies)

Rating reflects your confidence in the suggested practice based on the amount of inferencing needed to go from the theory or the results to the practice. To determine that confidence, consider:

How much extrapolation is needed to go from the theory to the practice, or is there supportive empirical evidence?

The greater the amount of inferencing, the lower your confidence would be.

G. Use - Usability

Rating reflects how usable the practice would probably be in 4th - 6th grade classrooms.

H. OC - Overall Confidence

Reflects your overall confidence in the practice as one supporting reading comprehension of 4th - 6th graders. This rating combines your ratings from previous categories.

I. Comments

Explains ? ratings, directing yourself or another person to look for the specific information needed to rate that category.

For all entries with a ? rating, provide complete bibliographic information and attach to the end of your rating sheets.

Synthesis _____
 Review _____
 Read by _____

CONFIDENCE RATINGS: READING INSTRUCTIONAL PRACTICES

Bibliographic Info: _____

Rating Scale: H (high) M (medium) L (low) ? (unsure → read original sources) * (supportive, beyond scope)

Practice	Sources	Theory	QS	SP	Inf.	Use	OC	Comments

Author (year) _____

Practice	Sources	Theory	QS	SP	Inf.	Use	OC	Comments

Source Code _____

CONFIDENCE RATINGS: READING INSTRUCTIONAL PRACTICES
ORIGINAL SOURCES

Read by _____

Author (year) _____

Rating Scale: H (high) M (moderate) L (low) ? (unsure) * (supportive, beyond scope)

<u>Practice</u>	<u>Theory</u>	<u>QS</u>	<u>SP</u>	<u>Inf.</u>	<u>Use</u>	<u>OC</u>	<u>Comments</u>

10

Purpose:

- _____ Opinion
- _____ Theoretical
- _____ Descriptive/Correlational
- _____ Instructional Intervention

Author (year) _____

<u>Practice</u>	<u>Theory</u>	<u>QS</u>	<u>SP</u>	<u>Inf.</u>	<u>Use</u>	<u>OC</u>	<u>Comments</u>	Source Code _____

130

181

Purpose:

- _____ Opinion
- _____ Theoretical
- _____ Descriptive/Correlational
- _____ Instructional Intervention



GUIDE TO: SCREENING FORM FOR TEACHER LITERATURE

Practice Name

Use the name of the practice designated by the author. If none is given, write one that describes the practice.

Description of Source

Give a brief synopsis of the article, chapter, or section of manual, to provide a context for the practice.

Description of Practice

Write the description or steps of the practice or copy the practice and attach it to the back of the form.

Theory

Code the practice according to the theoretical base indicated by the author.

- 1 = None provided
- 2 = Decoding/Skills/Behaviorist/Information transfer
- 3 = Strategies/Schema/Metacognitive/Cognitive/Interactive
- 4 = Whole Language/Psycholinguistics/Transactive

Research Study(ies) Cited as Support

Indicate author(s) and year(s) of any studies cited as supporting evidence for this practice. Attach a copy of the article's reference list to the back of the form.

Teacher/Author Experience

If the author provides any examples of using this practice, briefly explain. (Examples: length of time, number of students, other "convincing" evidence)

Support for Practice/Quality of Support

Indicate how well supported this practice is from the information provided in the article/chapter, in your opinion.

COMMENTS: Would I use this practice . . .

Write an evaluative statement which captures your overall sense of the practice and its utility as a reading comprehension practice.

TEACHER JOURNAL ANALYSIS METHODOLOGY

1. Scan the journal to identify possible articles.
2. **Criteria for inclusion.** Select articles or sections of articles that describe practices with a direct relationship to reading comprehension. Practices should be applicable to students in grades 4 - 6. Often the author will make this relationship explicit. Do not include practices with purposes related to improving readers' decoding abilities unless a connection is made to reading comprehension. Do not include practices focused on teaching beginning readers how to read. Do include vocabulary practices when these practices focus on meaning. Include writing practices when these practices are presented with the purpose of affecting reading comprehension.
3. Read the introduction of the article to get a sense of the author's theoretical base.
4. **Generating a Reference/Code List.** On a separate file generate a code list for each article, using the following format. Each article will be coded using the initial J and a number. Jackie will begin with J001, and Kim will begin with J501. Number each article consecutively. Next, write the reference, using APA style. This system will save you the time of re-entering the reference for each practice discussed in one article. It will also generate a reference list.

Example of a citation:

Schwartz, R. M., & Raphael, T. E. (1985). Concept of definition: A key to improving students' vocabulary. The Reading Teacher, 39(2), 198-205.

5. **Guidelines for completing the analysis form.**

Analyzer: Enter your initials.

Citation Code: Enter the code for the journal article. (E.g., J027, J534.)

Theoretical Base: Indicate the theoretical base of the practice.

Use the following codes.

- 1 = none given
- 2 = decoding/skills/behaviorist/information transfer
- 3 = strategies/schema/metacognitive/cognitive/interactive
- 4 = whole language/psycholinguistics/transactive

Page No.: Enter the page number(s) which describe the practice.

Practice: Complete this line when the description of the practice includes 1) a purpose for the practice, and 2) a thorough description of the practice which a novice teacher could implement after reading. If these two criteria are met, write a name for the practice in this space. Use a name which is indicative of the practice. If the author's name for the practice does not clearly indicate the practice, generate a new name, using as much of the author's language that is included in the description as possible. When this is necessary, put the author's name for the practice in parentheses after the name you have given it.

Mention: Complete this line when the above two criteria are not both met. Mentions are also practices, but they require much prior knowledge to implement. Name the mentions the same way you would name the practices.

Purpose: (___ explicit; ___ inferred) Indicate with an X whether the purpose of the practice is explicitly stated by the author or inferred by you. Then copy or summarize the purpose of the practice or mention.

Description: (___ copy attached) If the description of the practice or mention is short, enter it verbatim onto your file. If it is long, make a copy of it and put an X in the blank.

Text information: Include any information the author has provided about the type of text for which this practice is appropriate. Leave this blank if no information is given.

Student population: Include any information the author has provided about the type of student for whom this practice is appropriate. Leave this blank if no information is given.

Research citations: (___ ref. list attached) Indicate the references the author has provided in support of this practice. If the list is long, enter the authors' last names and dates only, copy the reference list, and put an X in the blank. If only a few citations are provided, enter them here in APA style. (Note: These are not the references provided in the rationale section, but those references that support the practice itself.)

Strengths/Weaknesses: Enter any strengths or weaknesses the author has indicated about this practice.

Comments: If there are any particular strengths or weaknesses you have inferred from reading about the practice, include that here. Also, any other comments about the practice, including its usability in a regular 4th - 6th grade classroom, should go here.

RESEARCHED READING COMPREHENSION PRACTICES

Grades 4-6

1. Lesson Frameworks

These may take various forms, but typically they have four components: prereading and/or purpose setting, reading, task related to purpose, and feedback about comprehension

a. Guided Reading Procedure (GRP) with Prereading Chapter Survey and Class Discussion

Survey of expository text, oral restatement of information, checking for missing information, organization of information into outline, silent reading.

b. Directed Reading-Thinking Activity (DRTA)

Predictions about text segment, reading to verify; verifying, changing, or adding predictions, reading to verify; etc.

c. Directed Reading Activity (DRA)

"Typical" basal lesson: prereading component focused on readers' background and vocabulary, reading, questioning, follow-up activities

d. Experience-Text-Relationship (ETR)

Developed for use with basal story. Three components: discussion of experiences or knowledge related to story, reading of short segments of story followed by questions, drawing of relationships between story and experiences and knowledge by teacher.

e. Revised Basal Lesson: Focus on Conceptual Vocabulary

Essential conceptual vocabulary is identified; students identify their critical attributes, providing examples and non-examples; students generate predictions about each word's relation to story; silent reading; predictions evaluated for accuracy; reasoning guides completed which contain inferential statements that students label as accurate or inaccurate and provide supportive story information for judgment.

Reading Practices

f. Revised Basal: Focus on Content Knowledge and Story Structure

Use various strategies to expand existing knowledge related to story content, such as analogies, word associations, semantic mapping; create story map as read story section by section

g. Revised Basal Lesson: Focus on Story Theme

Key story concepts identified and introduced including the genre of the story; segments of text are read; between segments, readers are provided purposes for the next section that are related to the story theme; questions are asked after each segment read that are related to the central story ideas.

h. Revised Basal Lesson: Explicit Strategy Instruction

Teachers explain skills as strategies; make explicit statements about what is being taught, when it would be used, and how to do it; lessons are organized in a sequence from the declarative presentation of information, to modeling, to instructional interaction with gradually diminished assistance, to practice, and to application.

2. Focus: Background Knowledge

The common purpose of these strategies is to engage the readers' background knowledge and in some cases also build relevant background knowledge.

a. Providing Background Knowledge Statements

Background knowledge statements related to the main idea of the passage but not directly stated in the passage are provided to students before they read. Students are told that this information will be helpful to them when reading.

b. Teaching/using Analogies

Readers are provided with familiar analogies. Similarities between the analogy and the new idea are explicitly provided to readers.

Reading Practices

c. Reading Conceptually Related Text

Before reading the target text, students read two conceptually related texts. These texts are selected to provide background information for the target information.

d. Providing Advance Organizers

Before learning, an advance organizer is presented. It contains information that is at a higher level of abstraction, generality, and inclusiveness than the material to be learned. This information can be already known by the learner, or it may function to also teach by providing new information at these higher levels.

e. Confronting Misconceptions

Students are told of their own or other commonly held misconceptions. An explanation follows which contrasts these misconceptions with the correct information.

f. Previewing Stories

The preview consists of the following steps: 1) series of short questions and statements focused on student interest, providing a link between familiar topic and topic of story, and assigned to encourage participation in brief discussion about theme and story topic; 2) synopsis of story; 3) character's names presented with statement identifying each; 4) 3-4 words briefly defined.

g. Reading Headings

Students read headings before reading the section of text.

h. Predicting Story Events

Students are asked question which focusses discussion on their prior knowledge relevant to topic. Next, students are asked to hypothesize what form similar information may take in the passage.

Reading Practices

i. Concrete Advanced Organizer

A modification of the advance organizer, such that it is written on same level as students' reading ability and contains information that is specific to the topic to be read. It relates the theme to the reader through analogies, and provides examples relevant to students.

j. Probing Background Knowledge

Students are probed to talk about their relevant background to the topic. They are also told that a helpful strategy while reading is to integrate what they know with what is new in the text.

3. Focus: Text Characteristics

These strategies are based on various features of text. These features may include the overall structure of the text, the syntax and the semantics

a. Story Mapping

Teacher provides a pictorial representation of a story map which includes, for example, setting, problem, goal, action related to goal, and outcome. While reading story, teacher shows students how to identify story parts, and map is completed. Goal is to teach students this strategy until they are able to complete maps independently.

b. Mapping Expository Text Structure

After reading expository text, students follow these procedures. First, they write title in center of paper. Second, text is skimmed, main ideas are identified, written around title, and underlined. Next, important details are identified and written under each main idea. Each main idea and its supporting details are boxed and connected to the title with a line. Mapping is followed by a study procedure.

c. Teach Lexical Ties

Teach students common connectives through various activities. For example, provide incomplete sentences that use connectives such as "because" in which students must provide the cause. Ask students questions about statements containing connectives. Provide lists of clauses and have students combine the ones that make sense together.

Reading Practices

d. Pattern Guide

A study guide to make explicit relationships between ideas in expository text is given to students.

e. Cloze Exercises

Students are provided with a passage in which words are deleted. They fill-in the deletions and discuss their choices of words with classmates. The focus is on the syntax and semantics that constrained their choices.

f. Sentence Anagrams

Students are given groups of words that can be combined. They are taught to form word groups by first identifying the verb ("action word"). Next they are asked a series of questions focussing on grouping the remaining words and seeing how the words are related to the verb.

g. Structured Overview (Graphic Organizer)

Students are presented with or help construct a graphic representation of key vocabulary for a passage. The representation is designed to show relationships among new concepts and previously learned ideas.

h. Teach Expository Text Structures

Teach students the top-level structure of their expository text and how to use that structure in their writing about that information.

i. Structured Overview and Cloze

Students are presented with a structured overview depicting the textual information and their relationships. This overview is used as a referent during classroom discussions both at the beginning of the day's lesson and at the end during a synopsis. Next, students are given cloze sentences based on the text. They use their text to complete these sentences.

j. Re-order Information

Using math word problems, students are taught to re-order the information to make problem solution easier.

Reading Practices

k. Identify and Eliminate Extraneous Information

Using math word problems, students are taught to identify and eliminate extraneous information.

l. Identifying Main Idea

Students are asked questions which focus on the specific topic, and thus on the main idea.

m. Concept Relationship Matrix

Information is organized on a two-dimensional matrix which assists the learner in organizing information and making comparisons. Column headings represent those ideas that are to be compared, while row headings represent the attributes for comparison.

n. Links: Mapping 5 Types of Text-Based Ideas

Teaches students to interrelate 5 types of text-based ideas. Each type of idea is a link. These are feelings, actions, thinking, situation and examples. Each link is composed of steps. This practice is used with stories.

o. Studying Map of Expository Text

Students are given a map of expository text which identifies topic, main ideas, and details related to main ideas. Students are taught a study strategy using these maps.

o. Completing Graphic Organizer Based on Text Structure

Students are given a partially completed graphic organizer that reflects the text's top-level structure. Key concepts from the text are used to complete it.

p. Idea-mapping: Diagramming Relationships of Ideas

Students are shown how to represent text-based ideas in a diagram. This map shows how ideas are related, and also identifies the types of relationships between ideas.

q. Revising Inconsiderate Text to be Considerate

Inconsiderate expository text is rewritten following the criteria for considerate text.

Reading Practices

5. Focus: Vocabulary

Practices in this focus reflect vocabulary knowledge as their primary purpose.

a. Synonym Drills

Students are given a synonym for each target word, often within a sentence. Students are provided drilled practice with the target word provided as stimulus and the synonym the expected response.

b. Decoding Drill

Students are drilled on vocabulary words in isolation until they can recognize them at sight. Sometimes both accuracy and speed are criteria for success.

c. Asking Questions to Determine Meaning from Context

Students are asked probing questions that focus on possible meanings of words as they are used in context. Readers are asked to justify their responses. Context of the entire passage is used, rather than one sentence.

d. Using Familiar Content to Teach Word Meanings

Students are given material with familiar ideas and/or redundancy, which aids in learning the new vocabulary.

e. Semantic Maps and Networks

Teacher and/or students use diagrams to show relationships of vocabulary important to main ideas of text.

f. Reading Text with Explicit Context Cues

Students are given text that provides explicit context cues for meanings of target vocabulary words.

g. Teach definitions

Students are either given definitions or are asked to look them up in dictionaries or glossaries.

Reading Practices

h. Concept Method

Words are taught as concepts rather than as definitions using the Frayer model of concept attainment. Examples and nonexamples are provided to help students identify critical attributes. Meanings are generated from these. Students are lead through steps until they can generalize about the concept.

k. Discussion to Relate Words to Prior Knowledge

Vocabulary words important to the main idea of the passage are selected. Students are told the meanings of the words. Questions are asked to promote discussion relating these words to students' existing knowledge and experiences.

l. Teach the Concept of Definition

Students are taught a mapping strategy that focuses on the attributes of a definition. They use this schema to develop richer concepts of vocabulary words.

m. Rich and Varied Vocabulary Instruction

8-10 words are introduced and taught over 5 days using various instructional methods in a sequence. These include defining tasks, sentence-generation tasks, oral and written production tasks, gamelike tasks completed under timed conditions, and tasks requiring semantic or affective relationships between words and previously learned vocabulary.

6. Focus: Independent Study Strategies

These practices are designed to provide strategies students can use independently when studying.

a. Survey, Question, Read, Recite, Review (SQ3R)

Designed for use with expository text. Students are taught to survey the text for the main ideas and topics, to use headings to predict questions that may be answered in the text, to read to find those answers, and to recite those answers to themselves. The cycle is repeated. Finally, the information is reviewed.

Reading Practices

b. Generating Summary of Each Paragraph

Students are taught how to generate a summary statement of a paragraph. They use this independently to remember information.

c. Study Guides

Teacher provides students with study guides which directs students to read one page at a time and answer prepared questions.

d. Post-Questioning

Students are provided with questions at the end of a passage.

7. Focus: Visualization

These practices emphasize visual images that represent the ideas in or generated by students' reading. The images may be concrete or imaginary.

a. Visual Imagery

Students are directed to create pictures in their head while reading.

b. Drawing

Students draw representations of the ideas generated from the text. This may be done with prose and math word problems.

c. Provide Pictures

Pictures are provided with text.

d. Mimetic Maps

Maps are provided to students which use symbols resembling actual features to represent those features.

8. Focus: Self-Monitoring/Metacognition

Though these strategies may incorporate other practices described on this list, they are mainly concerned with students' awareness and control over their reading and learning processes.

Reading Practices

a. Learning Strategies (Chicago Mastery Learning)

These strategies focus on the thinking steps that students can engage in to learn within the context of a specific purpose. There are four types of strategies: organizational, imagery, contextual, and reflective thinking.

b. Underlining Interesting Words

Students are directed to look for and underline words within text that might be interesting to an imaginary character. They imagine telling this character why these words are interesting.

c. Strategic Approach

The efficacy of various reading strategies is emphasized during instruction.

d. Informed Strategies for Learning (ISL)

ISL is concerned with increasing readers' understanding of reading tasks, goals, and strategies by describing what, how and why various strategies influence reading.

e. Reciprocal Teaching

Teacher models steps in comprehension for students; students eventually engage in same activities. After teacher asks students to make a prediction about text from title and students read, the modeling component begins. It consists of generating questions about text, summarizing, predicting, and clarifying confusing information. Over time, more of the instruction is assumed by students.

f. Inference Awareness

Providing students with step-by-step procedure for developing inferences while reading.

9. Focus: Teacher, Text Generated Questions

Questions provided by either the teacher or text are used to promote reading comprehension. These may be asked at various times during reading.

Reading Practices

a. Question Answer Relationships (QAR)

Students are trained to identify three types of questions asked about text and strategies for answering those questions. This practice focuses on where the answers can be found.

b. Story Characters

Teachers direct students' prior knowledge to the problems of story characters through questioning.

c. Asking Inferential Questions (post reading)

Students are asked questions requiring inferences after they read.

d. Reflective Questions

Students are asked questions about the form and content of text, to make predictions, and to justify their responses.

e. Interspersed Post Questions

Questions are interspersed at the end of each page during content area reading.

f. Text Look Back Strategy

Teachers teach children when to look back in text for answers.

g. WH- Questions

Asking wh- questions after students incorrectly read a portion of text.

10. Focus: Self-Generated Questions

In these practices, students are taught to generate their own questions about text.

a. Predictive Questions

Students are taught to generate story-specific questions that activate prior knowledge.

Reading Practices

b. **Knowledge, Want to Know, Learned (KWL)**

Teaching students to monitor prior knowledge, purposes for reading, and information to be remembered.

c. **Important Points**

5-step questioning plan to understand and relate main ideas.

d. **Higher-order Questions**

Teaching students to ask critical questions about text.

e. **Reciprocal Post Questions**

4-step procedure in which teacher models questioning, students respond by asking more questions. Discussion follows.

f. **Self Questions Plus Underlining**

Students identify important words and generate questions about the words.

11. **Focus: Modality**

These practices are concerned with different types of communication modes - speaking and listening - to enhance reading comprehension.

a. **Dramatizing Stories**

Students use dramatic play, puppets, and pantomime to comprehend and remember story events and characters.

b. **Oral Reading**

Students read text aloud.

c. **Silent Reading**

Students read text silently.

12. **Focus: Oral Reading Accuracy**

These practices are concerned with the accuracy of oral reading, and the effects of accuracy on comprehension.

Reading Practices

a. No Corrections During Oral Reading

Teachers emphasize comprehension when students read orally and do not interrupt students when errors are made.

b. Corrections During Oral Reading

Teacher stops students during oral reading when they read incorrectly, and corrects those errors.

13. Focus: Reading and Writing

These practices integrate comprehension and composition processes to enhance learning and memory.

a. Summarizing

Students are taught to summarize various lengths and types of text.

b. Sentence Combining

Students are given words or phrases and taught how to use syntactic and semantic cues to combine them.

c. Reflective Questions

Students are taught to reflect in writing about their comprehension of text.

d. Writing After Listening to Stories

Students use texts as models for their own writing.

e. Creative Writing After Reading

After reading, students are asked to extend the text beyond the author's ending.

14. Focus: Critical Reading

a. Direct Instruction in Critical Reading

Training students to detect instances of faulty generalization, faulty causality, and invalid testimony.

Reading Practices

16. Focus: Attention/Selection

These represent strategies a teacher might use to direct students' attention to important information.

a. Provide Purpose

Teacher provides purpose for reading.

b. Provide Objectives - Behavioral

Teacher tells students behavioral objectives associated with text information before reading.

c. Advance Organizer

Students are provided with a higher-level text before reading.

17. Focus: Memory & Retrieval

This practice stresses ways to elaborate information to promote subsequent memory of that information.

a. Elaboration Training for Arbitrary Text

Readers are taught to think of information that relates apparently unrelated information.

A P P E N D I X B

CHAPTER 4

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Followup Questionnaire	3
Training Procedures--Observation Analysis	4

RIS PRE OBSERVATION

School _____ Code: _____

Teacher _____ Observer _____ Date _____

Start time _____ End time _____

Describe the layout of the classroom and the general structure of the reading instruction (e.g. learning centers, ability groups with the teacher while others work independently, etc.). Include descriptions of centers when appropriate and general reactions to the classroom design.

Materials used by the teacher-centered groups: (describe groups, name of group, number of students; indicate text name and page number)

- 1) _____
- _____
- 2) _____
- _____
- 3) _____
- _____
- 4) _____
- _____

Material used by remainder of class:

Observer Comments:

OBSERVATION SHORTHAND

- M+ - management through positive statements
- M - management - general instructions - procedural
- M- - management through correction of behavior
- 1:1 - teacher-student one-on-one
- S - teacher refers to a student by name
- SOR - student oral reading
- SOT - students off task
- SQ - student asks question
- SR - student responds to teacher question
- SSR-B - students silently reading (basal)
- SSR-O - students silently reading (other)
- SWB - students working in workbook
- SWP - sweep (gather information about class)
- SW - students writing
- TB - teacher refers to board/chart/etc.
- TCW - teacher checking work
- TGM - teacher gets materials
- TOM - teacher organizing/shuffling material
- TOR - teacher oral reading
- TT - teacher talk (questions, statements, responses
(can't hear))
- TRM - teacher roaming around group/room
- TSR - teacher silently reading
- TUM - teacher uses manual (refers to)
- TWB - teacher writes on board/chart/etc.
- ... - more but couldn't get all.

Code:

FOLLOWUP QUESTIONNAIRE

Reflect on the classroom experience immediately following the observational period, mark your responses on the checklist and make comments when appropriate.

1 = never 2 = seldom 3 = sometimes 4 = frequently
5 = always

- 1) Students in the instructional groups were on-task.
1 2 3 4 5
- 2) The teacher spent the time on instructional related activities rather than management and discipline.
1 2 3 4 5
- 3) Students who were not in the instructional group were on-task.
1 2 3 4 5
- 4) Students who were not in the instructional group interrupted the teacher to ask questions.
1 2 3 4 5
- 5) The teacher spent time disciplining students outside the instructional group.
1 2 3 4 5
- 6) There is a positive, warm, relationship between the teacher and the students.
1 2 3 4 5
- 7) The students were enthusiastic.
1 2 3 4 5
- 8) The students were motivated extrinsically.
1 2 3 4 5
- 9) The teacher gave positive feedback.
1 2 3 4 5
- 10) The teacher gave negative feedback.
1 2 3 4 5
- 11) Any reactions to the lesson:

Observer Comments:

TRAINING PROCEDURES - Observation Analysis, Phase ONE 3-11-88

- A. Steps to follow in analyzing observations to arrive at lesson themes.
1. Read through transcript to gain a sense of the lesson(s).
 2. Divide the transcript into one or more lessons according to such criteria as change in instruction, change in materials, change in focus, or other cues.
 3. Describe what the teacher is doing in one lesson. Cues may be found in teacher's own language, purpose setting statements, steps or sequence which the lesson follows, etc. Use one sentence or phrase, focusing on what the teacher is doing and what the students are doing or expected to do. Use verb + -ing + noun(s) format statements.
- B. Steps to follow in analyzing observations to arrive at instructional events. Instructional events comprise lessons.
1. Identify lesson theme.
 2. Read carefully through lesson, noting each time teacher talks. Make marginal notations about what teacher is doing to carry out the lesson theme during each turn of teacher talk. Note: one marginal notation may cover a sequence of teacher turns at talk when they are related to the same teacher action.
 3. After marginal notations have been made, keep a running list of unique instructional events. (These will be used later to code marginal notations on transcripts during Phase 2 of Observational Analysis.)

A P P E N D I X C

CHAPTER FIVE

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TEACHER BELIEF INTERVIEW: FIRST

Background:

Number of years teaching--grade levels--types of kids.

Preservice education. Where? Special program? Reading Program?

Student Teaching. Where? When?

How did Cooperating Teacher teach reading? Any innovative instruction in his/her class?

Probe--quality of student teaching experience. . .

What types of things do you read, now. when you have a chance?

Reading and Learning to Read

When a student enters into Grade ____, what should that student be able to do in terms of reading?

Probe--Their conviction, not what the "program" expects.

What can a really good reader do?

(difference between good and poor reader qualitative or quantitative?)

When that student leaves Grade ____, what can she do?

So how has that student learned to read up to Grade ____ ?

What accounts for the differences between a good and poor reader?

Probe--parents? Genetic? Good teaching? Learning style?

Is it possible for a teacher or other person to help a poor reader become a good reader?

How do you define reading comprehension? What is included in that?

Reading Instruction

Could you describe the way you teach reading comprehension?

Probe: Typical day

Reading Out loud

Objective: vocabulary? Remembering ideas?

Memorizing facts

Questioning students: why? What is a good response? What is a poor response? What is a creative response?

Where did you learn to teach it that way?

Have you ever had inservice/ graduate courses on how to teach it?

Have you ever tried something different? Why? What happened?

Have you ever wanted to do something different?

Grouping. On what basis? Why?

Probe: Do you change the groups? Why?

Have you ever tried to teach the whole group? Under what conditions would you do so?

Do you do different things in the different groups? Why?

What indicates to you that a lesson is going poorly?

How is teaching reading different from teaching math? from teaching science or social studies? From teaching writing?

Probe: More/less difficult? Less clarity about objectives?

Do you ever feel like you are getting behind in reading?

The Students

Describe the students in your class. Do they have a pretty good chance of making it through school?

Describe a student who is having great difficulty in reading

Probe: cause, what is teacher doing about it

Describe a student who is just slightly behind--not terrific, but not a real problem.

Probe on same

Describe a student who is really doing well. Cause, etc.

The School

Do you feel that there is a characteristic way of teaching reading comprehension in this school?

Do you know what the other teachers are doing? I mean sort of?

How do you know?

Do you ever observe in other classrooms?

Do you exchange materials, ideas, methods?

Communication with other teachers? Specialists?

CODING SYSTEM: RIS BELIEF INTERVIEWS
FEBRUARY, 1988

The Teacher

Preservice Teacher Education
Student Teaching
Experience
Anxiety
Efficacy/Attribution
Origin of Teaching Practice
Personal Reading

TE
ST
EX
AN
EF
OR
PR

Students

Students
Teacher's Expectations for Students
Good Readers
Poor Readers
Average Readers
Learning Disability
Motivation/Self Concept/ Affect

S
SE
SG
SP
SA
LD
AF

Reading/Language

Reading
Reading Comprehension
Vocabulary
Spelling
Word
Talking/Communicating
Listening
Learning to Read

R
R
V
SL
WO
T
L
LR

Teaching/Teaching Reading

Teaching--General
Peer Teaching
Teaching Reading
Basals
Questioning
Other Texts (inc. library)
Grouping
Grading/Assessment

TG
PT
TR
B
Q
TX
GR
G

Other Subjects

Art
Social Studies
Science
Writing
Math

A
SS
SCI
W
M

School

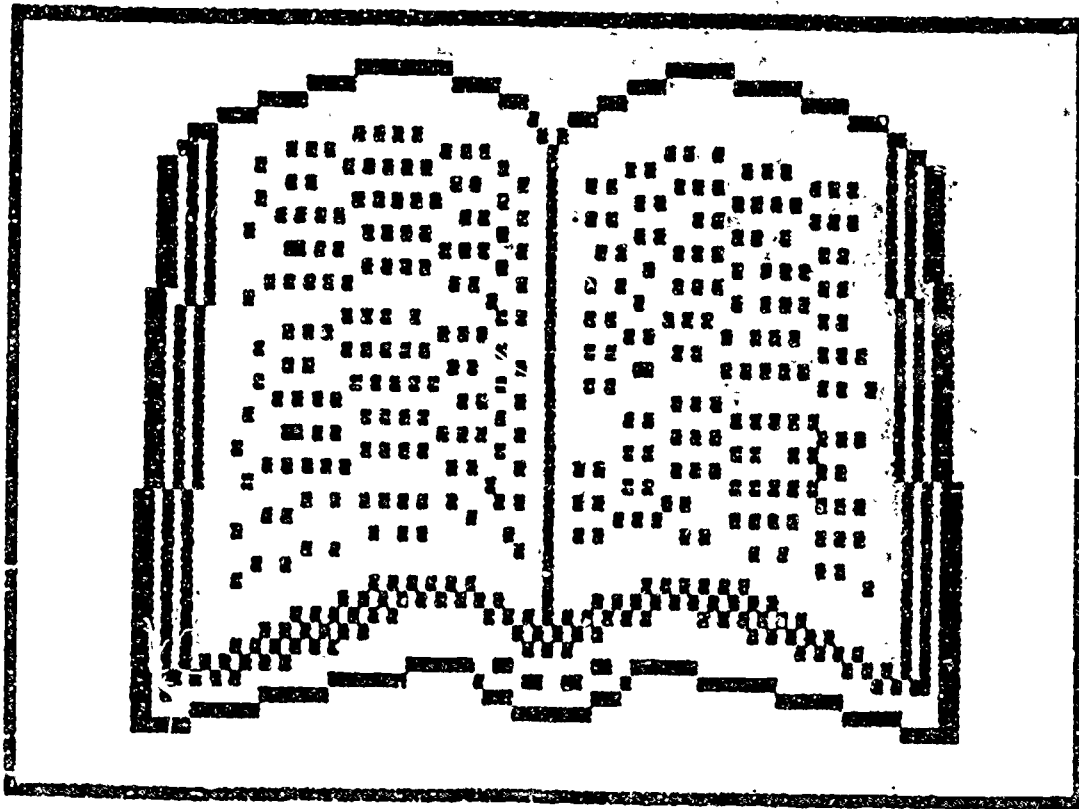
School
Other Teachers
Specialists
Principal
Parents

SC
OT
SPE
P
PA

SCHOOL CODE: _____

A Study of Teachers' Research-Based Instruction of Reading Comprehension

SCHOOL LEVEL QUESTIONNAIRE



The University of Arizona
College of Education
Tucson, Arizona 85721
(602) 621-1212

PLEASE READ THE INSTRUCTIONS on the following page before completing your questionnaire.

RIS: School Level Questionnaire

INTRODUCTION

PURPOSE OF THE SURVEY: Your school is participating in a project on the teaching of reading comprehension in grades 4-6. Several teachers in your school (perhaps you are one of them) are helping University of Arizona researchers find out how teachers approach reading comprehension in these grades, and what research information on reading comprehension they might find useful.

As part of the project, the participating teachers will receive staff development services, both as a group and individually. In order to design the staff development component to fit the needs of your teachers, we need to learn more about your school. That is how this survey came about.

INSTRUCTIONS: On the following pages you will find questions about your job, your teaching, and your school. Specific instructions are given at the start of each section. Please read them carefully. If you do not find the exact answer which fits your case, choose the one which comes closest to it.

It should take about 30 minutes to complete the entire questionnaire.

CONFIDENTIALITY: Your answers to these questions are completely confidential. Only school-wide results will be reported.

Your input is very important for the success of this effort. Please answer each question as honestly as possible, and please complete all items.

Thank you for your participation in our project, which we hope will be of great benefit to teachers in your school.

YOUR JOB

A. Below are a number of statements which could describe your job. Indicate whether each statement is an ACCURATE OR INACCURATE description of your job. CIRCLE ONE RESPONSE for each item.

	Definitely Accurate	More Accurate Than Inaccurate	More Inaccurate Than Accurate	Definitely Inaccurate
1. I feel certain about how much authority I have.	1	2	3	4
2. I know what my responsibilities are.	1	2	3	4
3. In this job, I have to work under vague directions or orders.	1	2	3	4
4. I often receive instructions without adequate resources and materials to execute them.	1	2	3	4
5. I often receive extra assignments without adjustments to the ones I already have.	1	2	3	4
6. There isn't enough time during my regular workday to do everything that's expected of me.	1	2	3	4
7. In this job, I am allowed to decide on my own how to go about doing the work.	1	2	3	4
8. This job denies me the chance to use my personal initiative or judgment in carrying out the work.	1	2	3	4
9. I can go for days in this school without talking to anyone about my teaching.	1	2	3	4
10. Most of the other teachers in this school don't know what I do in my classroom or what my teaching goals are.	1	2	3	4
11. I can get good help or advice from other teachers at my school when I have a teaching problem.	1	2	3	4
12. Other teachers at this school come to me for help or advice when they need it.	1	2	3	4
13. Other teachers encourage me to try out new teaching ideas.	1	2	3	4
14. I know exactly what is covered by teachers in the grade level above and below me.	1	2	3	4
15. My instruction fits in sequentially with the program at this school.	1	2	3	4

B. Circle ONE response for EACH item.

1. Teachers need a variety of resources to perform their jobs. During the current school year, HOW OFTEN has an INSUFFICIENT quality and/or availability of the following resources created a PROBLEM for you in doing your job?

	Seldom or Never a Problem	Occasionally a Problem	Often a Problem	Always or Always a Problem
a. Instructional materials	1	2	3	4
b. Equipment	1	2	3	4
c. General classroom supplies	1	2	3	4
d. Space	1	2	3	4
e. Assistance from teacher aides	1	2	3	4
f. Assistance from staff or school district specialists	1	2	3	4
g. Cooperation from parents	1	2	3	4
h. Time for instructional responsibilities	1	2	3	4
i. Time for noninstructional responsibilities	1	2	3	4
j. Time to meet with other teachers	1	2	3	4
k. Time to meet with parents	1	2	3	4

2. HOW OFTEN do each of the following classroom conditions pose PROBLEMS for you in performing your job?

a. Classes that are too large	1	2	3	4
b. Students who are not motivated to learn	1	2	3	4
c. Students who are incapable of learning	1	2	3	4
d. Students who have insufficient background knowledge for your class	1	2	3	4
e. Students who are abnormally unruly	1	2	3	4



C. We are interested in the opportunities teachers in your school have to talk and meet together.

1. In a typical day, how many other teachers do you TALK with on a ONE-TO-ONE basis? CIRCLE ONE.

- 1
- 2
- 3-4
- 5-10
- 10 or more

2. HOW OFTEN do you have the opportunity to talk with other teachers about:

	Several Times a Day	Several Times a Week	Several Times a Month	Monthly or Less Often
a. Instructional problems and techniques	1	2	3	4
b. Individual students	1	2	3	4
c. Subject matter and course content	1	2	3	4
d. School goals, objectives and priorities	1	2	3	4
e. New instructional ideas	1	2	3	4
f. Techniques for teaching reading	1	2	3	4
g. Student achievement	1	2	3	4

3. HOW OFTEN do you have an opportunity to MEET with the following teachers to discuss SCHOOL-RELATED ISSUES?

a. My team teacher (where applicable)	1	2	3	4
b. Other teachers at my grade level	1	2	3	4
c. Teachers at other grade levels	1	2	3	4
d. All the teachers in my school	1	2	3	4

YOUR TEACHING

A. Teachers make many decisions each day about instruction. HOW MUCH INFLUENCE do each of the following have on your decisions?

	<u>Very High Influence</u>	<u>Good Deal of Influence</u>	<u>Some Influence</u>	<u>Little Influence</u>
1. My own experience	1	2	3	4
2. What other teachers are doing	1	2	3	4
3. What the district curriculum requires	1	2	3	4
4. What the principal advocates	1	2	3	4
5. Goals and objectives of our school	1	2	3	4
6. What I read in teaching publications	1	2	3	4
7. How the students respond	1	2	3	4
8. What research says will work	1	2	3	4
9. What I learn at in-service trainings	1	2	3	4

B. Teachers rely on many different SOURCES FOR INFORMATION ABOUT TEACHING. HOW OFTEN do you rely on each of the following? Circle ONE response for EACH item.

	<u>Always or Almost Always</u>	<u>Frequently</u>	<u>Occasionally</u>	<u>Seldom or Never</u>
1. Materials from in-service training	1	2	3	4
2. Materials from university courses	1	2	3	4
3. Articles in teaching publications	1	2	3	4
4. Articles from research journals	1	2	3	4
5. District curriculum guidelines	1	2	3	4
6. Instructions in textbook manuals	1	2	3	4
7. Advice from other teachers	1	2	3	4
8. Advice from building principal	1	2	3	4
9. Advice from district or school specialists	1	2	3	4
10. Ideas I develop myself	1	2	3	4

C. Now we are interested in how you would rate the VALUE of various sources of information on teaching available to you. Please rate each item according to HOW VALUABLE they have been to you in your teaching.

	<u>Extremely Valuable</u>	<u>Very Valuable</u>	<u>Somewhat Valuable</u>	<u>Not at all Valuable</u>
1. In-service training	1	2	3	4
2. University courses	1	2	3	4
3. Teaching publications	1	2	3	4
4. Research journals	1	2	3	4
5. District curriculum guidelines	1	2	3	4
6. Textbook manuals	1	2	3	4
7. Other teachers	1	2	3	4
8. Building principal	1	2	3	4
9. District or school specialists	1	2	3	4
10. Ideas I develop myself	1	2	3	4

D. HOW ACCURATE are the following statements about your GENERAL OUTLOOK ON TEACHING?

	Definitely Accurate	More Accurate Than Inaccurate	More Inaccurate Than Accurate	Definitely Inaccurate
1. I frequently try new ways to teach students.	1	2	3	4
2. Once I find a teaching strategy that works, I stick with it.	1	2	3	4
3. I experiment with new teaching strategies only when I am experiencing problems.	1	2	3	4
4. There are many equally effective ways to teach students.	1	2	3	4
5. Some ways of teaching students are better than others.	1	2	3	4
6. I am always looking for better ways to teach.	1	2	3	4
7. Expertise on good teaching exists in the profession of teaching.	1	2	3	4
8. At this school, I have many opportunities to learn new things.	1	2	3	4
9. There is a body of knowledge out there that can really help teachers improve their teaching skills.	1	2	3	4
10. Good teaching is a gift -- you really can't learn it from someone else.	1	2	3	4
11. When it comes right down to it, how much students learn depends mostly on their home environment and not on what teachers do.	1	2	3	4
12. If I really try hard, I can get through to even the most difficult or unmotivated students.	1	2	3	4
13. It's hard to feel successful with many of the students we have at this school.	1	2	3	4
14. I feel that I am making a significant difference in the lives of my students.	1	2	3	4

YOUR SCHOOL

A. Consider the GOALS that exist in your school. For each item, please circle the response that MOST ACCURATELY DESCRIBES your school.

- | | Definitely Accurate | More Accurate Than Inaccurate | More Inaccurate Than Accurate | Definitely Inaccurate |
|--|---------------------|-------------------------------|-------------------------------|-----------------------|
| 1. We have explicit goals for student achievement in this school. | 1 | 2 | 3 | 4 |
| 2. There are explicit guidelines at this school about the things teachers are to emphasize in their teaching. | 1 | 2 | 3 | 4 |
| 3. Discussion about school goals and how to achieve them is a part of our school faculty or in-service meetings. | 1 | 2 | 3 | 4 |
| 4. The principal of this school encourages teachers to talk with each other about instructional objectives. | 1 | 2 | 3 | 4 |
| 5. I generally agree with our school goals and objectives. | 1 | 2 | 3 | 4 |

B. Consider TEACHER PARTICIPATION AND STAFF DEVELOPMENT at your school. HOW ACCURATE are the following statements?

- | | | | | |
|--|---|---|---|---|
| 1. Teachers have the opportunity to participate in defining goals, objectives and priorities for our school. | 1 | 2 | 3 | 4 |
| 2. In this school, teachers participate in selecting instructional texts and materials. | 1 | 2 | 3 | 4 |
| 3. In this school, teachers participate in determining what we're going to be evaluated on. | 1 | 2 | 3 | 4 |
| 4. In this school, teachers participate in determining the type of in-services we have. | 1 | 2 | 3 | 4 |
| 5. Teachers at this school participate actively together in in-service trainings. | 1 | 2 | 3 | 4 |
| 6. Afterwards, teachers at this school discuss the topics covered by in-service trainings. | 1 | 2 | 3 | 4 |
| 7. Teachers at this school implement things we learn at in-service trainings. | 1 | 2 | 3 | 4 |

C. Schools emphasize different INSTRUCTIONAL AREAS in their goals, programs, and staff development. In your opinion, HOW MUCH EMPHASIS does each of the following areas of instruction currently receive in your school?

	Very High Emphasis	Great Deal of Emphasis	Some Emphasis	Little Emphasis
1. Mathematics	1			
2. Social Studies	1			
3. Reading	1			
4. Science	1			
5. Writing	1			
6. Computer skills	1			
7. Second language learning	1			
8. Art	1			
9. Music	1			
10. Physical education & health	1			
11. Other: _____	1			

D. Schools have many goals for their students. HOW MUCH EMPHASIS does each of the following GOALS FOR STUDENTS receive in your school?

	1	2	3	4
1. Developing students' social skills	1	2	3	4
2. Improving students' achievement	1	2	3	4
3. Meeting students' emotional needs	1	2	3	4
4. Developing students' practical life skills	1	2	3	4
5. Encouraging students' cultural awareness	1	2	3	4
6. Promoting equal educational opportunity for students	1	2	3	4
7. Developing students' problem solving or thinking skills	1	2	3	4
8. Encouraging students' creativity and personal expression	1	2	3	4
9. Other: _____	1	2	3	4

E. We are interested in the type and frequency of interactions you have with your principal. When you speak on a one-to-one basis, HOW OFTEN does your principal talk to you in the following ways?

	Seldom or Never	Occasionally	Frequently	Always or Almost Always
1. Shows appreciation for your work	1	2	3	4
2. Shows confidence in you	1	2	3	4
3. Assigns you specific tasks	1	2	3	4
4. Gives helpful information or suggestions about teaching	1	2	3	4
5. Asks for your suggestions or opinions	1	2	3	4
6. Asks you for information, clarification, or explanation	1	2	3	4
7. Clarifies what is expected of you	1	2	3	4

F. When you speak on a one-to one basis with your principal, HOW OFTEN do you discuss each of the following?

1. Instructional problems and techniques	1	2	3	4
2. Student behavior	1	2	3	4
3. Subject matter and course content	1	2	3	4
4. School goals, objectives, and priorities	1	2	3	4
5. New instructional ideas	1	2	3	4
6. Teacher-parent relationships	1	2	3	4
7. Your need for equipment, supplies or other resources	1	2	3	4
8. Changes in your work assignment or schedule	1	2	3	4
9. Other: _____	1	2	3	4

Which of the following comes closest to indicating how often your principal observes your work with students?

- 1
several times
a day
- 2
several times
a week
- 3
several times
a month
- 4
monthly or
less often

G. We are interested in your ideas about how your teaching is evaluated at this school. HOW ACCURATE are the following statements?

	Definitely Accurate	More Accurate Than Inaccurate	More Inaccurate Than Accurate	Definitely Inaccurate
1. My principal has a clear perception of how well I perform my job.	1	2	3	4
2. The standards by which my teaching is evaluated are clear and well specified.	1	2	3	4
3. The methods used in evaluating my teaching seem objective and fair.	1	2	3	4
4. When the principal comes into my classroom, the visit lasts long enough to see what I am trying to do.	1	2	3	4
5. Evaluation of my teaching has helped me improve as a teacher.	1	2	3	4

H. The following items ask you to describe the relationship between the principal and teachers at your school. HOW ACCURATE are the following statements?

1. Our principal encourages teachers to exchange ideas and opinions.	1	2	3	4
2. The principal and teachers collaborate toward making our school run effectively.	1	2	3	4
3. Teachers at this school think of the principal as being "one of us".	1	2	3	4
4. Our principal participates in instructionally-related decision making with teachers.	1	2	3	4

YOUR BACKGROUND INFORMATION

Please CIRCLE the appropriate response:

1. Sex: 1 Female 2 Male

2. What is the HIGHEST COLLEGE DEGREE you hold? (Do not report honorary degrees) Circle ONE.
 - 1 No degree
 - 2 Two-year college diploma, degree or certificate
 - 3 Bachelor's degree
 - 4 Master's degree
 - 5 Education specialist or professional diploma based on 6 years of college study
 - 6 Doctorate degree

3. By the end of the current school year, how many years of FULL-TIME TEACHING EXPERIENCE will you have completed? Fill in the NUMBER OF YEARS.
 - ___ total years of experience
 - ___ total years in present school system
 - ___ total years in present school
 - ___ total years in present position

3. Which of the following BEST describes the GRADE LEVEL of your teaching assignment? CIRCLE ONE.
 - 1 K-3
 - 2 4-6
 - 3 Other: _____

4. Which of the following most accurately describes your current assignment? CIRCLE ONE.
 - 1 Regular classroom teacher, with my own classroom
 - 2 Regular classroom teacher, teaming with another teacher
 - 3 Special education teacher
 - 4 Other: _____

5. How many more years do you expect to work in the public schools?

_____ (NUMBER OF YEARS)

SCALES

(With attributions and alphas)

1. Role Ambiguity (Organizational Analysis and Practice, Inc.; cited in Bacharach et al., 1986) Labelled "Clear Responsibilities" on graphs.

I feel certain about how much authority I have.

I know what my responsibilities are.

In this job, I have to work under vague directions or orders. (reverse scored)

Alpha: .67

2. Resource Conflict (Organizational Analysis and Practice, Inc.) Labelled "Resources Match Responsibilities" on graphs.

I often receive instructions without adequate resources and materials to execute them. (reverse scored)

I often receive extra assignments without adjustments to the ones I already have. (reverse scored)

There isn't enough time during my regular workday to do everything that's expected of me. (reverse scored)

Alpha: .75

3. Resources: Material (Organizational Analysis and Practice, Inc.) Labelled "Adequate Materials Resources" on graph.

Teachers need a variety of resources to perform their jobs. During the current school year, HOW OFTEN has an INSUFFICIENT quality and/or availability of the following resources created a PROBLEM for you in doing your job?

Instructional materials
Equipment
General classroom supplies
Space

Alpha: .78

4. Resources: Time (Organizational Analysis and Practice, Inc.) Labelled "Adequate Time" on graph.

Time for instructional materials
Time for noninstructional responsibilities
Time to meet with other teachers
Time to meet with parents

Alpha: .85

5. Classroom Environment (Organizational Analysis and Practice, Inc.) Labelled "Positive Student Population" on graph; item on class size originally grouped with this scale was omitted for this analysis.

HOW OFTEN do each of the following classroom conditions pose PROBLEMS for you in performing your job?

Students who are not motivated to learn
 Students who are incapable of learning
 Students who have insufficient background knowledge for your class
 Students who are abnormally unruly

Alpha: .69

6. Autonomy (Organizational Analysis and Practice, Inc.)

In this job, I am allowed to decide on my own how to go about doing the work.

This job denies me the chance to use my personal initiative or judgment in carrying out the work. (reverse scored)

Alpha: .66

7. Collaboration (Rosenholtz et al., 1986)

I can go for days in this school without talking to anyone about my teaching. (reverse scored)

Most of the other teachers in this school don't know what I do in my classroom or what my teaching goals are. (reverse scored)

I can get good help or advice from other teachers at my school when I have a teaching problem.

Other teachers at this school come to me for help or advice when they need it.

Other teachers encourage me to try out new teaching ideas.

Alpha: .76

8. Instructional Coordination (Rosenholtz et al., 1986)

I know exactly what is covered by teachers in the grade level above and below me.

My instruction fits in sequentially with the program at this school.

- Alpha: .74
9. Frequency of Teacher Discussion (Adapted from Organizational Analysis and Practice, Inc.)

HOW OFTEN do you have the opportunity to talk with other teachers about:

Instructional problems and techniques
 Individual students
 Subject matter and course content
 School goals, objectives and priorities
 New instructional ideas
 Techniques for teaching reading (added)
 Student achievement

Alpha: .86

10. Frequency of Staff Contact (New)

HOW OFTEN do you have an opportunity to MEET with the following teachers to discuss SCHOOL-RELATED ISSUES?

My team teacher (where applicable)
 Other teachers at my grade level
 Teachers at other grade levels
 All the teachers in my school

Alpha: .69

11. Goal-Setting (Rosenholtz et al., 1986) Labelled "Clear School Goals" on graphs.

We have explicit goals for student achievement at this school.

There are explicit guidelines at this school about the things teachers are to emphasize in their teaching.

Discussion about school goals and how to achieve them is part of our school faculty or in-service meetings.

The principal of this school encourages teachers to talk with each other about instructional objectives.

I generally agree with our school goals and objectives.
 (New)

Alpha: .84

12. Teacher Participation (First item, Organizational Analysis and Practice, Inc.; others, Rosenholtz et al., 1986)

Teachers have the opportunity to participate in defining goals, objectives and priorities for our school.

In this school, teachers participate in selecting instructional texts and materials.

In this school, teachers participate in determining what we're going to be evaluated on.

In this school, teachers participate in determining the type of inservice we have.

Alpha: .72

13. Positive Response to Inservice (New)

Teachers at this school participate actively together in in-service trainings.

Afterwards, teachers at this school discuss the topics covered by in-service trainings.

Teachers at this school implement things we learn at in-service trainings.

Alpha: .84

14. Evaluation (Item 1, Organizational Analysis and Practice, Inc.; Items 2-4 Rosenholtz et al., 1986; Item 5 adapted from Rosenholtz et al., 1986) Labelled "Positive Response to Evaluation" on graphs.

My principal has a clear perception of how well I perform my job.

The standards by which my teaching is evaluated are clear and well specified.

The methods used in evaluating my teaching seem objective and fair.

When the principal comes into my classroom, the visit lasts long enough to see what I am trying to do.

Evaluation of my teaching has helped me improve as a teacher.

Alpha: .90

15. Principal Leadership (Items 1 and 2 from Smylie, 1988; Items 3 and 4, Rosenholtz et al., 1986)

Our principal encourages teachers to exchange ideas and opinions

The principal and teachers collaborate toward making our

school run effectively.

Teachers at this school think of the principal as being "one of us."

Our principal participates in instructionally-related decisionmaking with teachers.

Alpha: .91

16. Principal Interaction Regarding Instruction (Organizational Analysis and Practice, Inc.)

When you speak on a one-to-one basis with your principal, HOW OFTEN do you discuss each of the following?

*Instructional problems and techniques

Student behavior

*Subject matter and course content

School goals, objectives and priorities

*New instructional ideas

Teacher-parent relationships

Your need for equipment, supplies or other resources

Changes in your work assignment or schedule

Alpha: .83

For a second analysis, instruction-related items (*) were split out. These are the results reported on the graphs.

RIS:PRINCIPAL INTERVIEW PROTOCOL

*Don't forget the School Fact Sheet!

Intro: We wanted to talk with the principals in our schools, to get a clear picture of reading at the school level. Lots of research happens at the classroom level, but there's also a lot of research showing that the school level is important, especially when a project involves staff development. If we want to understand how reading works, and how staff development will work here, we have to look at the whole school.

Background:

Could you talk about your background in education, the experiences you had before you became a principal?

Do you have any special training or experience in certain areas?

What led to the decision to become a principal? How did you prepare for that?

How long, then, have you been a principal? Where did you work as a principal before coming to this school?

How would you describe yourself now as a principal?

The School:

When you first came to this school, what were your first impressions?

How did you go about getting to know the school, the staff?

What are some of the things you have been working on since coming here?

What would you say you are still working on?

Right now, how would you describe the overall program at this school?

Would you say this school has any special goals?

Since we're working only with intermediate grades, is there anything we should know about differences across grade levels, or between primary and intermediate grades?

Teachers:

Moving on to talk about the teachers now, how would you describe your staff, as far as their experience, their styles of teaching, their ideas about teaching, etc.

What do you look for in hiring a new teacher for your school?

What do you hope for as far as your relationships with teachers?

What kinds of relationships among teachers do you want to see in your school?

How can you as a principal contribute toward that?

How are decisions about instruction made at this school?

How involved are you in decisions about classroom instruction?

Tell me about staff development at this school, say in the past couple of years.

Who usually comes up with ideas for in-services?

If needed: Do you get involved in any way?

How do you evaluate teachers? What do you look for?

If you see areas where you think an individual teacher needs to improve, how do you approach that?

In your opinion, as both a teacher and a principal, what do you think are the most effective ways to improve teaching?

Are there any people or resources you think are especially helpful for teachers who want to improve their teaching?

Reading:

Looking at the reading area in particular, when you were a teacher, how did you like to teach reading?

Now that you are a principal, how do you evaluate reading instruction?

When you think of a good teacher of reading, what do you think of?

Is there a similar way of teaching reading among the teachers here, or do they vary? How?

How much would you say the teachers rely on the basal reader for guidance in teaching reading?

What happens with a child who is above grade level in reading? below grade level?

If needed: Do the teachers place children in reading groups? How do they go about that?

How do the teachers use the library as a resource for reading?

Who would you say has influence over how reading is taught at your school?

How are reading textbooks selected?

How about the achievement test scores in reading at your school. Do you think they have any influence over decisions about reading instruction?

Are there any special programs in reading at your school that we should know about?

What directions or policies does your district have for reading?

What district resources or staff people are available to your school in reading? How are they being used at your school? Could you give some examples?

If you had a problem with the reading program, who would you call?

Who would the teachers call?

Who else would be important for us to talk to, if we really want to understand the reading program?

If you were doing staff development in reading with this group of teachers, how would you approach it?

Our staff development is about introducing research on reading comprehension to teachers. Do you have any ideas about the responses of teachers to research?

Is there anything you would like to add to this interview, about yourself, about the school, the teachers, or the reading program? Is there anything else that would be important for us to know if we want to understand how reading instruction works at your school?

ARRANGE FOR QUESTIONNAIRE!!!!!!!

Note: The two curriculum specialists were interviewed with this same protocol, but the interviews were considerably shorter, as the interviewer did not repeat items for which the principal had already provided basic factual information on the school.

School Fact Sheet: R.I.S. Project

School Code: _____

SCHOOL PROFILE:

Number of students: _____ Grades: _____

Number of classrooms: _____ K-3 _____ 4-6

Number of regular classroom teachers: _____

Average class size: _____

Do classrooms have teacher aides? _____ (Explain)

Specialists available at the school:

_____ Reading specialist

_____ Curriculum specialist

_____ Speech/hearing specialist

_____ Chapter I teacher(s)

_____ LD teacher(s)

_____ ESL teacher(s)

_____ Gifted program specialist

_____ School counselor

_____ Other:

STUDENT PROFILE:

Ethnicity:

Percentage of free/reduced lunch students:

Directions for Classroom
Observations

To: RIS Classroom Observers
From: Peggy
Re: School organization indicators to watch for

In the course of visiting your respective schools twelve times, you will undoubtedly hear and see many things which relate to what is loosely called "school climate" or "school culture" -- without even being aware of it. Since I can't expect you to spend lots of time roaming around the schools spying (er - observing) for me on each visit, I am proposing a few things to watch for on the first six visits. Please read through the entire list before you visit your school for the first time, and don't feel that the order I am proposing is sacred. These are simply "focus" items for people like me who get overwhelmed by having to think about too many things at once. You may want to jot the focus topics on your notepad before each visit to the school.

If you have any extra energy (hah!), write down anything else you notice, anytime. Or talk with me in person. Tell me any little tidbits you pick up, and even wild hunches you have -- I can always check them out. You do not have to type your notes on school organization for me; having taught seventh grade I can read any handwriting. Simply jot them on the back of the POI or on a separate sheet. If we make arrangements for mailboxes at each school, make it a habit to check the box when you check into the office each day. I will make up files for all of the notes and mail from each school and keep them in a place accessible to everyone.

Initial Visit:

1. General impressions you have of the school's outer appearance, the neighborhood, etc. (briefly)
2. Entry: When you entered the school, what was your impression of the general "atmosphere"? Was it easy to find your way around? Were there any directions to the office, "welcome" signs, "school pride" banners, posters, that sort of thing? Was student work posted near the entry?
3. The Office: Were you given prompt attention? Welcomed in any special way? Introduced to others? If you observed any interactions between students or parents and the office staff, how would you describe these? Also note any interactions you might have had with the principal, any observations you have of him/her. Did someone offer to accompany you around the school? If one is available, ask for a map of the school to help you around. Otherwise, draw a very rough sketch of the layout later.
4. The Hallways: You will probably be taking a trip through the halls to meet with your teacher(s). Please note if student work, school rules, etc. were posted in the hallways. What feeling did you get from travelling through the school? What was your fleeting impression of the classrooms you passed? Did you observe any student or teacher interactions which seemed notable to you?
5. The Teacher(s): How would you describe your first meeting with each teacher? Did they seem to have been well informed about their participation in the study? What questions did they have about the study? How will they be integrating you into their classrooms? Did they do or say anything which led you to the opinion that they will facilitate your work? Merely cooperate passively? Did you sense any resistance, even?

Observation Visit 1:

This time, just doublecheck your initial impressions from the first visit, and note anything you could not catch the first time around. On this and each of your first observation visits to each classroom, please note the kind of reception you received, i.e. the apparent reactions of the teacher and the students to your presence.

Observation Visit 2:

Look specifically for evidence of reading-related materials, posters, children's work, in the school at large. Think READING. Was there evidence of the importance of reading in this school? What kind? What were some of the "reading slogans" you may have seen posted in the school? (e.g. "This is READING MONTH at Finklestein School!!!" or "Reading opens whole new universes!")

Observation Visit 3:

Take a little side trip to the LIBRARY if you can. If possible, introduce yourself to the librarian and give him/her our brief "official" description of the study. If he or she made any comments in return, note them down after you leave. How would you describe the layout, resources and atmosphere of the library? Were there children there -- doing what?

Observation Visit 4:

Think RULES and NORMS of student conduct. Were rules for student behavior posted in the hallways? In each room? What were they? Were there common patterns of student behavior management across the classrooms you have observed so far? Or was each classroom different? Did teachers use the principal or assistant principal for support in this area? How would you describe student classroom behaviors you have observed so far? If you have observed any times when students were in the hallways or playground, going to lunch, recess, etc., how would you describe their behavior then? Was there any evidence of littering, vandalism, fighting? Was "good behavior" rewarded or recognized on a schoolwide basis, in any way you could tell? (For instance, in one school I observed, classes could receive points toward pizza parties for keeping their cafeteria tables clean.)

Observation Visit 5:

By now you will be somewhat familiar with the school. This time, think back over your visits, about interactions you have observed among teachers in the school, or between the principal and the teachers. Think STAFF INTERACTIONS. Do teachers pop in and out of each other's rooms? Talk in the hallways? Have you seen any evidence of sharing of ideas and materials? Teaming? Staff development meetings? Mentoring? Evaluation? Did the principal make his/her presence known in any way? Did other administrative personnel or specialists visit the classroom? (I realize your chances to observe such things will be very limited. But this will provide a little bit of a check on what the teachers report on their school questionnaires about "teacher collegiality.")

Observation Visit 6:

Summarize what you have observed so far about the ORGANIZATION OF READING INSTRUCTION in this school, in grades 4-6. What commonalities and differences did you see across classrooms, in methods, materials, grouping, scheduling? Did you observe any children who seemed to receive special reading instruction? From whom? In the classroom or as a pull-out? (I realize after only one visit to each classroom you may still be foggy on this, but give me your initial thoughts.)

Whew! Just do the best you can, without overworking yourselves. This is not intended to add too much to the time you spend in the school, or the time you spend writing up your observations. If you keep your eyes and ears open while you're at the school, and scribble these things down soon afterwards, before you forget them, that will be fine. On the second three-week round, we will either look again at some of these same things, to fill in the picture, or I will think of some new things to look for. Like the quality of bulletin board artwork or teacher hairstyle preferences, important things like that.

To: RIS Classroom Observers
 From: Peggy
 Re: School level observations for the "second round"

Some of you have finished your first six observations already, or will soon, so I need to make some suggestions for further school-level features to observe. The following categories are derived from the Rosenholtz school organization questionnaire we may be using, which was derived in turn from the literature on school level features which seem to influence teacher change. It will be interesting to see if your observations match with the responses we get on the questionnaires. Once again, it is obvious you have limited time for noticing these things, but anything you observe is helpful. Again, no typing required!

- 1) Teacher comments regarding use of their time; for example, school-level or district demands which take time from instruction, complaints about stress or pressure from these demands.
- 2) Teacher comments about rules or policies of the school or district which control or restrain what they can do in the classroom.
- 3) Interruptions of classroom instruction by other school activities; for example, PA announcements, special programs, changes in schedules. (Either things you notice or teacher comments.)
- 4) Teacher comments about their enjoyment or satisfaction in teaching, or any indicators you have picked up of these feelings (or the lack of them) among teachers.
- 5) Teacher comments about their own sense of "efficacy"; for example, comments about whether they feel they are succeeding with their students, making a difference, seeing clear results. Also comments about why they may not be seeing results, e.g. about the "kinds of students" at this school, or in their classroom. Are they optimistic or pessimistic about the effects of their work?
- 6) Your assessment of coordination of instruction both within and across grade levels. By this I mean, if a child were transferred from one classroom to another, would it be difficult for him/her to plug into the reading program? Across grades, do you see how instruction at one level relates to that at the next level? (A very tough thing to tell in a few observations, I know.)
- 7) Your observations of the role of the principal, e.g. any principal interactions with teachers, or with you, visits to the classroom, comments from teachers about the principal. (In general, the literature discusses the idea of the "principal as colleague" in effective schools, vs. the idea of the principal as

a hierarchical "boss" figure.)

8) Your observations of any examples of teacher collegiality and collaboration -- continue to look for these. They are supposed to be very important in the success/failure of school innovations.

9) The "image" people at the school are projecting for the school. Continue to note the kinds of slogans, posters, information which direct messages to people coming into the school. E.g., common ones are "Zellerman School is the Greatest!!!" "We love our volunteers!" Do these things seem like empty slogans to you, after all these visits, or do they match your outsider's observations of and reactions to the school?

10) Your final conclusions about similarities and differences across classrooms at this school, in classroom organization, student management, and instruction. Are there any general ways to characterize these at the school, or did you find a great deal of diversity across classrooms?

Thanks! I have really appreciated reading the comments you have filed so far. If in reading the above categories you have any "flashbacks" to things you saw or heard in the first round, by all means add those, too.

CODES FOR SCHOOL LEVEL1. Researcher-school contacts and responses

RSC Researcher contacts with school
 RPS Researcher presentation of study
 PRS Principal remarks on study
 OPR Observations of principal responses to participation
 OTR Observations of teacher responses to participation
 OTO Teacher statements to observer

2. General school description

ODS Observer description of school
 ODC Observer description of classroom(s)
 ORN Observations of school rules and norms
 PDS Principal description of school, general

3. School population, students

OSP Observer description of student population
 PSP Principal description of school population
 OSW Observations of student work
 OSB Observations of student behavior

4. Principal, general (Note: For the two interviews with curriculum specialists, codes were the same as for the principal, but with an "S" as the first letter.)

OPD Observer's principal description
 OPT Observations of principal-teacher interaction
 OSC Observations of school specialist (two schools)

PBG Principal background, general
 PPP Principal on being a principal
 PGO Principal general objectives for school
 PRT Principal on own relationship with teachers
 PII Principal influence over instruction
 PDI Principal view of district influence
 PAT Principal position on achievement tests

5. Teachers and teaching, general

OTD Observer's teacher descriptions
 OTI Observations of teacher-teacher interactions
 OIG Observations of instruction, general
 OTS Observations of teacher-student interactions
 PPT Principal positions on teaching

PIT Principal "Ideal" teacher
 PDT Principal description of teachers, general
 PPI Principal on primary-intermediate differences
 PTC Principal on teacher change
 PIC Principal influence over teacher change
 PTD Principal on teacher decisions re: instruction
 PTP Principal on teacher participation
 PTT Principal on teacher-teacher relationships
 PET Principal evaluation of teaching

6. Reading at this school

ORE Observation of reading emphasis in school
 OLB Observer description of library
 OIR Observations of instruction, reading

 PBR Principal background, reading
 PPR Principal position on reading
 PRO Principal reading objectives
 PLB Principal on function of library
 PDR Principal description of reading instruction
 PER Principal evaluation of reading instruction
 PSR Principal sources of information on reading

7. Research and staff development themes

PTR Principal position on teachers and research
 PRR Principal remarks on research, researchers, university
 PSD Principal staff development ideas

 OSD Observer's staff development ideas for this school

RIS: Codes for Teacher Interview Data on the School LevelSchool in General

TDS Teacher descriptions of the school
 TST Teacher descriptions of students
 TPA Teacher descriptions of parents
 TRD Teacher remarks on the district

Principal

TPR Teacher comments on principal

Teachers at this School

TOT Teacher comments about other teachers
 TTC Teacher comments or collaboration/interaction among
 teachers
 TSP Teacher comments on school specialists

Reading at this School

TWT Teacher descriptions of ways of teaching reading at this
 school
 TSA Teacher description of special schoolwide reading activities
 TRS Teacher remarks on poor/good reading as a characteristic of
 a school
 TLB Teacher remarks on the library at this school

A P P E N D I X D

CHAPTER SIX

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Teacher Af

The videotaped lesson involved a basal selection entitled "Benny's Flag, " which she presented to her class in a whole group setting. The story was chosen because it coordinated with the students' social studies unit on the Pacific states. Prior to reading, Af and the students previewed it, discussed possibilities, and made predictions.

During her practical argument Af addressed very specific, mostly student-centered, issues:

1. Act of Reading: Af wanted her students to view reading as challenging and exciting and hoped they would develop a "different direction of thought" in the process. Further she wanted them to make connections between the stories and their own ideas and find a more "fruitful way of looking" over the reading.

2. Personal Experience: Af found personal experience important in her own view of reading and important to a student's interpretation of what had been read. Every aspect of Af's theories of teaching linked with her personal experiences as a student. These personal experiences also related to prediction, because students could draw on those personal experiences to make predictions.

3. Assessment: Af was concerned particularly about the assessment of students. She encouraged her students to predict what teachers wanted and predict test behaviors, because she felt the tests determined a large portions of a person's life choices.

4. Personal achievement/self esteem: practical argument was a great concern for Af. Fourth grade, according to Af, was "bridge", a time when students found "out about themselves." Labelling would cause problems. To counteract negative labelling, she had devised Terrific Readers in Training (TRIT) that would raise self-esteem and teach necessary strategies.

5. Questioning: She did believe in using comprehension check questions, unless you worked on them before the story. These themes were initially presented by Af in her belief interview and were carried through the Staff Development program.

At the conclusion of the practical argument interview Af decided to pursue two areas. First, she wanted to work on questioning, particularly in relation to predictions. Second, she wanted to consider ability grouping and its usefulness.

Staff Development - School A - Group Component

The group component of the School A staff development looked, at superficial glance, much like any other staff development. The teachers met in the school library with the staff developers as group leaders. The School A teachers chose when the meetings would be held and the frequency of the meetings. They decided to meet three times per month unless school schedules conflicted. Prior to the meetings, there was time for socializing and snacking on treats brought in by a research associate. Scheduled to begin at 2:15 p.m., ten minutes after the end of school, the meetings usually began at 2:30 p.m. About 2:30 p.m. SD1 or SD2 would say, "OK, let's get started," and the staff development began.

In this section, I summarize School A's staff development. For each meeting I briefly describe the topics discussed and feature teacher responses with particular attention to the highlighted teachers, Aa and Af. The brief summary of the staff development sessions focuses on the evolution of thought taking place for the teachers. The complete description of the staff development sessions can be found in Appendix D.

Introductory State - Sessions 1-8

From the very first moment of the first sessions, the Staff Developers encouraged the teachers to set their own agenda. Interestingly, the teachers did not seem to believe them. Throughout the first session and continuing through the introductory state, the teachers kept asking for directions for the right way to teach reading.

The first session simply introduced the Project to the teachers and the teachers to the Project. Observation of these sessions also identified Aa and Af as powerful forces within the faculty.

During the second session, the teachers were asked to begin to talk about their beliefs. These revelations come in the discussion of their belief interviews. They responded to a request for volunteers to discuss their interviews. As one teacher asked a question about teaching reading, the group responded, both staff developers and colleagues.

This session also focused on questioning as an area of interest identified by the teachers. There were lists made and charts drawn, but time precluded a long discussion.

A perpetual theme, "Doing it right", was addressed during this session. Each teacher seemed quite concerned about doing it right. In fact, they appeared hesitant about sharing their practices because of that fear.

In the third session, one teacher, Ad, flare up when pressed to discuss his practices. He accused the Project of promoting one right way of teaching reading. Although SD1 assured him that was not the case, Ad appeared strong in his conviction. In a later conversation it seemed that Ad was actually upset with colleagues who, in his opinion, were misrepresenting their teaching practices to please the Staff Developers.

After a continued discussion of belief interviews, the topic turned to questions. A list was drawn and the teachers discussed the purposes of questioning. Many of them agreed that they asked questions to develop and assess students' work. It was also during this session that Aa mentioned accountability for the first time. This later became a major focus of discussions. He mentioned it in the context of wanting parents and principals to be able to recognize his reading program.

As the sessions progressed, the teachers' beliefs about teaching and reading became more apparent, particularly for those who participated. For example, Af's student-oriented approach and Aa's concern for pleasing the parents became obvious. At this point the teachers were still not discussing their practices at great length, although they quickly began to mention them practices periodically.

In session 4, SD1 once again underscored the importance of teachers generating their own ideas for the staff development. She attempted to reassure the teachers that the staff developers felt it was imperative for the teachers themselves to establish what to consider as the right way to teach reading.

The topic then turned again to questioning and a matrix designed from the teachers' information. Quickly, however, it moved to accountability and grading. Concerned as they were with teaching the right way, they were also concerned with grading correctly. The teachers told a story about how the principal and the district "made" them do certain things. The principal, who was present in that session, refuted this allegation. Yet, the teachers went right on believing. The teachers appeared uncertain about grading, confused about the purposes, and under a great deal of pressure, seemingly self-inflicted, to please parents, principal, and students. Listening to the discussion, it appeared that grading may be the driving concern in their teaching beliefs.

This theme continued in session 5. There was an initial attempt to return to the activities matrix, but the topic quickly returned to assessment. The teachers had many horrors to share about grading and accountability, but no one seemed to agree on either issue. A continuing theme for Aa emerged in his concern that reading was subjective, but you needed to fit into an objective mold for success. A theme for Af also emerged, that of objectifying grades when she recognized them as objective.

The teachers in this session were also manifesting some hostility. They seemed anxious, fidgety and unwilling to discuss their own personal experiences. It would appear that the perceived powerlessness made them very uncomfortable.

Session 6, a session actually cancelled after the research team arrived because of an overload of teacher commitments, was more of the same. After cancelling the meeting, several teachers stayed around to discuss feelings of powerlessness and the inadequacies of the grading system.

In the midst of this discussion when the Staff Developers asked the teachers to direct the next session, they asked, "What do you want to work on?", again attempting to relinquish their power. SD1 and SD2 reassured them that they (the Staff Developers) would not present anything except topics chosen by the teachers.

Session 7 began in the new year. The teachers appeared renewed when talking about the Project. That, however, was quickly thrown aside when the teachers again asked the Staff Developers to tell them (the teachers) what they thought was exciting. Aa stepped in and suggested that the teachers bring in their "pet concerns," and he would discuss quality versus quantity approaches to reading.

Since the last session, the teachers were given an article to read on assessment, but they did not read it. The topic, therefore, moved toward a discussion of what Ab was doing in his classroom with activities designed from his participation in this Project.

The teacher next launched into an intense discussion of the students' inadequacies. Most of the problems were blamed on the home. SD2 responded vehemently to comments made by Ag about his students. Although she apologized immediately, many people appeared uncomfortable. In his defense, Ac said the Ag was "just speaking the truth."

SD2 then expressed her frustration about not conveying the importance of certain strategies. She wanted teachers to use them and they were not.

Aa turned the topic in a quality/quantity of reading direction. He presented his practices, and the teachers questioned him. Interestingly, this was one of the first times that practices were shared.

Breakthrough Stage - Sessions 9-10

Session 9 was devoted to assessment. SD1 pressed the teachers to elaborate on their beliefs about grading. She questioned the tests and their grading system. Both SD1 and SD2 continuously attempted to draw out beliefs and have them elaborate on their strategies. Unfortunately, the teachers appeared unwilling to consider alternatives and appeared quite angry about being pressed to elaborate on their beliefs.

In session 10 the teachers moved into the breakthrough stage. They expressed their feelings about the last session, and their feelings that the program was, in fact, not working. They were still waiting for the staff development program to "present a best way of doing reading." They said they wanted structure and boundaries. They also wanted specific assignments.

Furthermore, they addressed the revealing nature of the staff development. Ag described his vulnerability, because there was "more emotion in this one" and ordinary staff development programs were cut and dried. Ab claimed that his awareness had been awakened; he was not as comfortable with his reading program as he had been. There were still teachers, however, after complaining about the control of the Project, who asked for a "bag of tricks."

After the critiques and complaints were all heard, SD2 quickly discussed reading practices. She expressed her own frustration about not being able to discuss the reading practices materials the research team had gathered.

This session was a breakthrough session because the teachers had made the step to assert themselves. They expressed their feelings, revealed themselves, and revealed their beliefs.

Empowerment Stage - Session 11

During session 11 the teachers, once warmed up, became to talk about their practices in the context of authenticity. The topic raised was the definition of an authentic teacher. Ac, for example, talked about her concern for controlling her classroom. Aa revealed his attitudes about reading.

In this session the teachers decided that this should be the final session. They each discussed the impact of the Project on their teaching. Several talked about the importance of the discussions. Others were quiet. Aa appeared the most affected by the Project from his comments.

The themes that flowed through the staff development program at School A were accountability and the desire to do it right. From their comments and their responses, they appeared far more concerned with these issues than any issue related to reading. It seemed as if these concerns permeated the teachers' decisions and actions. One theme related to practice was questioning. During several sessions, questioning was addressed and explored.

Staff Development - School F - Group Component

The participants in School F's staff development were the four intermediate grade teachers and the special education/multiply-handicapped teacher. These teachers volunteered for the program although both the principal and the curriculum specialist suggested that participation would be a good idea. These teachers were also offered incentives from which they could choose.

The staff development program, occurring once a month, took place at SD1's home. This location was chosen because it was accessible and because the teachers felt it was imperative to meet off-campus both for their well-being and for their comfort in revealing issues. SD1's home had a large living room area where the teachers met. There were comfortable chairs with coffee tables arranged in the area for books and a large glassed-in area that provided a lovely view. Certain qualities of the living room area, where the staff development took place, were less than conducive to a staff development. For example, although there were large windows with a beautiful view, the lighting was not balanced with areas that were quite dark. Two couches were very squishy and began to enfold you as you sat there. Additionally, the teachers often seemed tired and relaxed into the furniture. There was also the added ingredient of Brownie, the dog, who drifted in and out of the meetings according to whim. At least a small portion of each meeting was devoted to him. Off the living room was the open dining area. On the clothed table there were usually treats of various sorts, either provided by the teachers or the research staff. Often, prior to the meeting, the School F teachers met together for lunch.

The initial meeting, held several weeks before the staff development program began (a) clarified the purpose of the staff development; (b) reaffirmed teachers interest' in participating in the program; (c) established the initial meeting time; and (d) introduced the research team.

Introductory Stage - Session 1

This first session began with a description of the Project. The teachers were reassured that the Staff Developers wanted "to figure out" the areas teachers wanted to cover.

One teacher, Fd, was the first to begin exploring the teachers' interests. She expressed concern about the evaluation of students. Others followed. Fc wanted to know how to meet the needs of a diverse student population.

The teachers seemed fascinated to hear each other speak. The similarity of beliefs surprised them. Prior to these meetings, there was little cohesiveness. They seemed to be thrilled by the new discoveries of colleagues.

Even in this session, the teachers, although apparently just getting to know each other, engaged in an exploration of practices. The teachers of School F appeared committed to using the staff development program to gain as much information and as many ideas as possible.

Breakthrough Stage - Sessions 2-6

Assessment was a major focus of session 2. First SD1 had the teachers first look at the activities students did when they are learning reading comprehension. They defined reading comprehension, explored the purpose of skills, and looked at ways to evaluate reading. Then the issue shifted to assessment and the problems related to it.

Next, the use of the basal reader was explored. Each teacher had their own opinion of the basal, some positive, some negative. Clearly they had thought about these issues a lot.

During this session the teachers seriously engaged in an exploration of practices. They spoke their mind about the basal, skills, and the purposes of reading comprehension. They also explored the issues of accountability and assessment.

It was also during this session that Mb became simply a participant rather than an administrator. When SD1 and SD2 challenged her statements and modelled challenging her direction, the teachers no longer acquiesced to her control. As they took control of the meeting, the breakthrough stage began.

The breakthrough state carried over into session 3. The initial discussion centered on the disruption of classes during reading. The teachers felt that they too often had interruptions.

Next, they discussed the focuses and SD2 clarified their purpose. Prior knowledge and other reading research issues were also discussed. Several teachers followed up by stating the importance of developing shared knowledge among teachers and students.

Many of the topics discussed involved "do you" questions. The teachers were almost desperate to find out what their colleagues had done. When a teacher brought up a subject, the others seemed compelled to discuss it and offer suggestions. They discussed journals, book reports, and formula answers.

The topic then turned, as usual, to assessment. How powerful were the parents, and what were the test criteria. Each had their experiences to relate, yet the similarities were strong. Along with these similarities, there was a discussion of the "power of the test-makers" and how often they gave the power of knowing students over to the standardized test people.

Finally during this session, a videotape of a teacher was viewed. The teacher was observed working successfully with students in groups. A discussion ensued that looked at the "traditional ways of teaching," as well as other aspects of teaching.

In session 4 the teachers began to talk more. Although SD2 initially provided an agenda, the teachers monitored it. They also requested modelling in the classroom done by Project staff.

An initial discussion for this session observed the differences between the use of the basal test and literature books. They each talked about their concerns and purposes for using the texts that they used.

Other issues of practice were discussed, including the use of vocabulary, writing, evaluation of students, and how to reach students. SD2 suggested that knowing the history of the classroom propelled the students faster along the path of knowing.

In session 5 the discussion began with an exploration of Fa's use of concept analysis and how it worked. The Staff Developers developed her practical argument as they proceeded, and the teachers listened and discussed ways of using it in their classrooms.

Next, they discussed the district gifted program at length and speculated on why that sort of process versus outcome teaching was not done throughout the district. The teachers discussed their opinions and could not come to a resolve.

From here the discussion turned to grading and how to approach it. Several teachers addressed the importance of recognizing prior knowledge and what the students knew as they entered the classroom. They also condemned the school reward system, because it set up a bad self-esteem problem. Further, at School F they were required to have a certain number of grades. Several teachers expressed fear that the principal would not support them if the parents challenged their grading. They also discussed grading alternatives.

One final discussion centered on an exploration of modelling done in Fb's classroom. The research associate explained why she thought it worked/did work as well as the participation of the students. Fb followed up with her concerns about certain students.

In session 6, after a brief discussion of a conference attended by two participants, the teachers explored the use of literature versus basal approach to reading in the classroom. The issue centered on the activities that followed reading. There were questions about comprehension checks, variations in students' questions, the suffocation of creativity, and providing feedback. Grading was another issue raised.

They also discussed the videotaped of a research associate modelling brainstorming in Fb's classroom. It was a mapping activity. First, the research associate discussed her experience, and then Fb discussed hers. It worked quite well in the classroom.

The session ended with an assignment. Each teacher was to go to their students and ask them what they thought reading was, so that the teachers could begin to elaborate on those ideas.

Empowerment Stage - Sessions 7-8

In session 7 the discussion leaned toward literature. Fd talked about the use of novels in her classroom as did Fe. Mb talked about the literature-based basal programs and their potential value. Fd then raised the issue of authenticity between a basal and literature piece. Fa brought up a question of skills.

Then they discussed the value of outlining to help students explore their lives. Outlining could help organize students' thinking as well as organize students' views of reading. As they discussed this the topic turned to reading and making sense of the text.

During a break in the meeting the teachers planned the next session. It would be a literature group, so that that type of discussion group could be modelled for them. They decided on book choices, dates, topics, and strategies. They were quite excited.

After addressing the issue of a good reading practice, the discussion moved into a look at students' views of reading. Many students had a different view of reading. As the discussion proceeded, teachers revealed their own learning to read stories. Interestingly, there appeared to be a connection between them, and the ways teachers taught reading. The teachers also made connections between their own processes and students' processes. This led to an insightful discussion of different students and their needs.

The shift from breakthrough to empowerment was subtle. The teachers did not simply take over. Rather, they eased into the empowerment stage and suddenly seemed to be directing the action. The level of excitement and interest seemed to raise in this process.

The final session began with a recounting of teachers activities. Four of the five teachers were working with novels. Their students were quite happy with that, and the teachers were pleased as well.

A literature group discussion followed, revolving around their book choice. They discussed the book, its important issues, and then ways they would use it with their students. Given the different interpretations in the room, it was certainly a testimony to the interactivity between the text and the reader. There was also a focus on the important of prior knowledge. The teachers appeared pleased by the discussion.

A final discussion turned to assessment and how students might be graded when literature was used. Each teacher offered suggestions. The key for most of the teachers was that they were professionals, and whatever decisions they made about assessment should be appreciated in that light.

As the meeting closed, the teachers talked about its success. They had revealed a lot about themselves, but were grateful for it. They realized the importance of knowing their own beliefs.

The themes for the School F sessions were varied. Specifically the struggle between what best served the students appeared to be a focal point--literature or basal. The teachers were also interested in the practices and the strategies used by their colleagues. This contact-starved faculty seemed glad for any tidbit of attention given to them and were willing to make the best of it. It appeared they wanted to make every moment count.

STAFF DEVELOPMENT FORM

SCHOOL A

DATE 11/14

SD# 3

PAGE 2

TOPIC	COUNTER	IMPETUS	WHO INITIATES	NATURE OF CONVERSATION	DISCOURSE MODE	PARTICIPATION	PRACTICE
->Questioning Strat.	1170	From what Af said	SD2 Af	"What are you doing differently?" Set of questions. Describes. SD2 referred to chart from last week: The Functions of questioning. Added 4th category called motivation. SD1 talks about connecting background knowledge to text. Af insists its really motivation.	Sharing Discussion	Listening. Ac & Ag make fun of either Sd2's or Af's hand motions	Questioning Strategies
->Reading questions first	1450	Responding to something SD2 says	Af	Af: Of course you read the question first. & other things to preview story. SD2: Convergent/Divergent thinking. Whose questions? Af: Finds that kids answer questions from their own purposes and may seem off the qall. Some answers in teachers' guide are terrible. They all like the open-ended questions. SD2 talks about publishers. Ab needs to hear who from the students.	Lecture 1 Much discuss with each other	Intense listening Everyone involved.	
Functions of questions	1840	Back on track & lull in conversation	SD2	Any other functions? Aa asks questions to get kids to stand up for themselves. Describes what he learned. SD2. Any Others? Ag asked lots of questions but it got out of line, so he quit. SD2 responds. Af talks--different functions, e.g. feedback	Sharing & Q/A Sharing One person responds, then another	Rest are listening	
->Students evaluating teacher	2155	From what AF said	SD1	Sharing a practice (one she used)	Sharing	Listening	Students evaluating teachers
Functions of questions	2190	Back to Agenda	SD2	Asks Af about what else he learned. AF "humbles" himself to use basal questions sometimes. SD1 tries to interpret response as function of making a good argument. AF dis agrees & gives eg. to illustrate--to draw a spirit. More positive feedback for others' purposes. Af taped himself.	Q/A Discussion	Listening	

11

FIGURE 2
PRACTICE DESCRIPTION
FORM

GROUP STAFF DEVELOPMENT

School A

Date: 11/14

SD# 3

Counter 1170

PRACTICE: Questioning strategies. Asks students two questions that they have to respond to for each piece of reading--often orally. 1) What do we now know? and 2) What questions do we still have?

WHO DESCRIBED: AF

QUALITY OF DESCRIPTIONS: Medium. Theory. Reason to use questions is to get kids connected with their background knowledge, and to give them practice talking out loud.

TYPES OF QUESTIONS/COMMENTS FROM GROUP: Clarifying questions, such as When do you ask the questions? Do you do this for every piece of reading?

COMMENT/FOLLOWUP: SD2 refers to chart from last week--functions of questions--and adds a category. Af brings up this or very similar practices several times. She clearly thinks this is an important activity.

FIGURE 3
Topic Map, Session 2: School F

Topic	Initiator	Activity	Follow-Up
1. Reading Activities/ Purposes	SD2	Brainstorming Activity (Recitation)	
->Practice, prereading questions	T	Sharing re prereading questions	leads to recitation
->>Why ask questions	SD2	Recitation	discussion
->What is comprehension	SD2	Q/A, discussion	discussion
->What is reading from kids view	SD2	Q/A	discussion
->What is grammar/word attack skills	SD2	Q/A	discussion
->>Definition of word attack and syntax	SD1	Lecture 2	
->Back to questions on skills/reading	SD2	Q/A	responses
2. Assessment	SD2	Comment, Q/A	discussion
->Writing as assessment	T	Sharing practice	some questions
->Back to assessment problems discussion	T SD2	Sharing practice Q/A	SD1 restating with different language
->>Accountability	T	Discussion, difficult to be accountable	all teachers
->Importance of testing	SD2	Challenge by T	discussion, SD2 and 4 teachers
->2 kinds of validity	SD2	Lecture 2	discussion by all teachers
[Back to 1] ->Purpose of doing grammar, kids can do it, raise self-concept	T	Comment	some discussion

Topic	Initiator	Activity	Follow-Up
[Back to 2] ->Relationship of assessment to accountability	SD2	Q/A and challenge	lots of discussion all teachers
3. Basals & Alternatives	SD1	Lecture 2. Nature of Basals & publishing industry	discussion of alternatives
->Reading programs	SD1	Lecture 2. All of them need structure	
->Grouping	T	Discussion. (Basals = grouping) literature day	discussion
->>Readability/Reading levels	SD1	Lecture 2. Practice, Joplin plan relies on concept of readability and levels	
->>Different type of grouping	T	Sharing, practice. Pairs of students working together	discussion, SD2 questioning
->Interdiscipline reading strands	T	Discussion—difficult to do	discussion
[Back to 2] ->>How do you assess that	T	Questions	discussion
->>>Delineation between knowledge & process	SD1	Lecture 2	
4. Grade level	T	Question—what grade level and who decides	discussion/ conversation
->Reading level	SD1	Lecture 2. Assumptions in Japan & Finland	
5. Phonics & Background Knowledge	SD1	Lecture 2. Can't sound out a word unless you know it	

Topic	Initiator	Activity	Follow-Up
[Back to 2]	SD2	How to do formative assessment while satisfying accountability	
->Grading listening	T	Question related to how you grade listening	
->District requirements	T	Lecture 2. How the grading works	lots of discussion
->Grading kids with limits (LD)	T	Sharing problems	lots of discussion
6. Agenda	SD1	Q/A Recital. What do we do next time	lots of discussion
->Literature	T	Suggestion to do this	
	T	Sharing practice	

APPENDIX I
 Conversation. Session 11, School A.

- T4: To what extent is reading an act of subordination to a given author?" To what extent is the author setting up the control, there is some extent where a reader is subordinated to the wiles of a writer and to a certain extent the reader has to be willing to submit to that and keep reading. I think anybody that has been a writer and writing to a particular audience is keenly aware of the degree to which they are exerting their control over their potential readers. Persuasive papers in particular. Is the reader going to follow me in this direction or are they going to stop and throw the paper down. It seems clear that there is an important control element in there too. Reading does have its inherent disciplines.
- SD2: So the student-reader has to submit to the control of the author as well as the control of the teacher?
- T4: My question is to what extent does that play a role in this whole thing.
- SD1: "I don't know the answer to what you are asking, but what do you mean by, I don't know what you mean when you said reading does have its inherent disciplines."
- T4: "Well, there is a sequential discipline clearly, to reading. You read it in a certain order that the author presented to you. At least in some degree."
- SD2: "Not every piece of writing."
- T4: "To some extent anything. You are not going to open the almanac and start at the end and read backwards."
- T2: "My husband, who had trouble in school, he and his friends were stunned in seventh grade when they learned how much easier it was in school if they read all of the words in a sentence from left to right and if they read all of the words on a page. They were seventh graders and to this day he must remind himself to read from the beginning to the end of the sentence. You ought to hang around with people who had a really tough time in school because it is really fun. Just driving down the highway he may pick out a few words on a sign to read but they may not be in the correct order, and you see I do that automatically. He does that if he is not really focusing and he maintains there are lots of kids like that. So exactly right, there is the discipline of going

left to right and from line 1 to line 2."

- T4: "Just because he created his own discipline doesn't mean he is undisciplined."
- T2: No, it is just they had a theory of reading that wasn't working for them and it was a certain discipline they found that if they followed someone else's theory of reading, he and his friends, then lots of things made more sense and they did better in school. So what seems obvious when you talk to someone that had a terrible time with reading, it doesn't seem so obvious. I think it is a discipline.
- T4: But even beyond the syntactical discipline, an author sets a mood that has to be tapped into in order to receive the message the author intended or one of a range of meanings. Possible that someone pick up a message or meaning that the author never intended, but when that happens I think the discipline of reading is breaking down and losing its effectiveness as a communicative tool.
- SD3: One of the things that I do is when the kids say a passage or a text has a particular meaning or this is the way they understand it is to ask them to go back to the book and use the authors words to show where they got that meaning. Having the reader find it in the text is one way to connect it with our own experiences, which are varied.
- SD2: Can they always find it?
- SD3: Can the student always find it, no. Although I think it depends on the student, some students would be able to articulate that. There is a lot of articulation that kids learn in doing this. They learn a whole different vocabulary and a whole way of talking about what they read, because they are not talking about a preconceived answer someone may have.
- SD2: "T4, I want to ask you, do you think it is possible for the reader to ever precisely figure out what the author intended?"
- T4: "Is it possible for an author to figure out precisely what he intends? No, there is no, I'm not talking about it in the singular. There is no one meaning, that is why I rephrased my comments in terms of a range of meanings. There is always a range."
- SD2: Sometimes I am absolutely amazed when somebody reads something I wrote and how they interpret it. I think, wow. And this is a contemporary shared meaning kind of thing and then I think about reading something that is 200 years old

and I really wonder.

T4: But on the other hand, if they read something that you have written and they respond to you in a way, in another way that gives you the impression that they were really tuning in to what you had invested in that, there is a real exhilaration in that, isn't there?

SD2: That has never happened to me (laughter).

T4: That has never happened, uah.

SD2: It is always like there is something really different, some people pick out things that were not a big deal for me when I was writing it. I thought it was almost obvious, however I threw that in there. I mean it is really remarkable.

T2: I think there is something in buying into the author's reality. Sometimes you read something and you won't pick up on something the author didn't intend because their reality, the world they were creating, whether fiction or non-fiction, is so different from what you want or you are in a bad mood. Assuming we are talking about good readers here. There is some way that you don't go into the author's world, so your eyes are going across the page and you don't have a clue what it is saying. As opposed to the person that comes into your world and sees something different from what you intended.

SD2: Yes. It could be my writing and you see (gestures to T4) that is another issue.

T2: But I think it also could be different focusing. A person that was visiting the family this weekend writes plays and novels and such in Denmark. Had a discussion about the author and he felt the only time you should be aware of the author is when you begin to "buy out" of that world. For some reason, when you begin to pull out a question. Whether it is fiction or non-fiction as long as it is real to you, you should be completely oblivious to the author because you are there. When, for some reason, the author's world comes to some disjuncture with what you could make coherent, whether it is your own world or not, you know you just can't make it coherent, then you pull back and say why did the author do that. Or what is going on here or what was the author's intent.

T1: Well, that is political then.

T2: I think that's what political writing is, creating disjunctures, situations that make you take a stance. It was an interesting point of view from an author, he hopes to

write in such a way that his readers forget he is there.

SD1: Can you imagine with your author friend, as long as, as a reader, my biases are being confirmed I don't think about them or challenge them.

SD2, T5 & T2 all oppose this statement.

SD2: I don't think you go along with it because the biases are the same.

T2: I think as long as biases are being stretched in a way that I can stretch. I mean I may get stretched but as long as it is in a way that I can imagine. It is when something comes up that I can't, I can't make the leap. He is not saying that it is a bad thing to make people step back and wonder about it, it is just...You know SD2, the thing we talked about last spring. When I read a book I am really into it, but if you ask me what are you reading before you go to bed at night I would be hard pressed to tell you the title, the author, or the plot. But when I am there it is like totally real and the house could burn down around me. I confessed this to SD2 in my interview last year and she said she did the same thing, and I have felt better ever since.

T4: To give another example, take poetry for a minute. I think one of the big differences in poetry as opposed to prose is that the author of the poetry makes more demands upon the reader to buy in to the mood or the rigor or whatever that has been woven into that poem. You have got to be "more committed to read a poem than to read prose." I think there is a greater degree of discipline there and I think that is why a lot of our children that we teach have a difficult time appreciating poetry. It is just a short little thing, they scan down it and say ok, I have read it. But they have not been willing to submit themselves to the richness that has been tied in in the space of a few verses. They can say I have read it but ok, well...

SD1: "Under what conditions would they be able to tie in to the richness? When would that happen? Are there poems that kids tie in to the richness?"

T4: Well, I think the most successful children's poet lately has been Shel Silverstein. He capitalizes on sensations. I think he capitalizes on the children's appreciation of the grotesque.

T5: Isn't that wonderful (chuckling).

T2: The babysitter.

- T4: Things like that. But even there it typically takes, I think they involve themselves better when somebody is reading it to them than when they read it themselves. I think there is still this tendency for students who are unaware of the discipline of reading to just look at that and skim through it without really involving themselves. A lot of it really has to do with slowing down. Let things sink in and not use a regular reading pace. If I used the same, last week I read To Kill a Mockingbird. Now if I used that same pace in reading poetry, like even Robert Frost, it would do me no good. I would be through with it and it would be over, it would be senseless for me to go through it at that same kind of a pace.
- SD1: Well, it is true we read different kinds of materials in different ways.
- T4: That's another one of the things I am talking about in terms of the discipline of reading. I think that is another aspect, sequentialness might be one, pace might be another one.
- SD1: I am unclear whether the meaning for you lies in what the author puts on the page or what the reader constructs or is it something inbetween? I think when you are saying this, I don't think we are talking about the same thing (hand movements to show on different paths.). But that is why I wanted examples of what you meant by disciplines. It sounds to me that for you the meaning is there in the text and you need to get it out, and there might be more than one or two meanings in the text.
- T4: I look at it this way; an author, particularly like Robert Frost who is writing poetry and to a lesser extent fiction, they are to some extent like a parable. And a good author, I'm sure, is aware of that as he is writing. That various people are going to approach this at a different level. Moby Dick is a good example. Very few people responded to Herman Melville according to the deeper message that he had in the book. He might have been mildly disappointed but I bet he was thrilled every time he went down to the bank. At least people were buying it and reading it and that was keeping him in business. But when someone showed up that was able to tap into some of the more subtle aspects of his book it would seem sure that he would be appreciative of that and respect the reader that he talked to that he was able to engage those aspects. I think that an author lays a valid claim to certain of the meanings that are communicated through that text.
- SD1: In something like Moby Dick I bet he would be surprised sometimes at some of the meanings that people found there.

And he would even say, oh yeah, I hadn't thought of it that way. I mean that is what I hear you (V) saying when somebody talks to you about an article you have written and you didn't even think that was very important. And yet you can see all that they can build out of it.

- T2: But wouldn't have liked it also if they had taken a little time and try and be real clear about what it was you were trying to say?
- SD2: Yes and no. Because a lot of times I think you are right R, I am surprised at what I say when I go back and read something of mine. You know sometimes construction will happen right as I am writing.
- SD1: The ideas come in. Or it might not be all finished yet.
- SD2: Right, or it is half way through. I guess what is important to me in what I write is not necessarily located within that written document. So I would like people to think like I am thinking but I realize that from the written document that is not always possible. Yeah, I would like everybody to think like I did when I wrote the document but it is not going to happen.
- T4: It is possible.
- SD1: I think that is a question, I wonder if it is possible.
- SD2: I don't know whether it is or not, I really don't know. My training in literature was a structural approach, which was to come as close to what the author was thinking when the book or poem was written. I bought into the notion that it would be possible to come as close as you can to something that was written 250 years ago, as long as you took all the time in the world. You figured out culturally what was going on in those times. You did structural analysis of the piece. And you could really come close to what that author was thinking and I was convinced of that until I started writing. Then I thought, no one is going to come close to what I am thinking when I write this thing. I mean even me. When I read it two years later it is not even going to be the same. When I read it, something that I have written. At this point I guess I have moved away from the notion that it is possible to get close to what the author was thinking.
- T4: What you say scares me because it seems to imply that it is impossible to communicate.
- SD2: What I think probably the problem with the other approach is that it is completely relativistic. That there isn't a meaning in a piece of writing. That is where, I think, the

social notion comes across. That: you begin to develop a shared notion through the social aspect of reading. But I agree, I think that is part of the problem people have with the notion of constructing meaning is that it all becomes relativistic. Is there a right answer ever.

- T2: Isn't it possible that reading is some of each? That reading is set within time constraints and resources to try to and construct the author's meaning or your best guess and then construct you own meaning and also with the people around you. Isn't it possible that reading is all of that, it is such a rich thing.
- T4: Put it this way, I would be scared with taking too much of a relativistic approach at say the sixth grade level because the kids might throw up their hands and say well, "poohy." You know, this is a big joke, somebody is writing all this words and there is nothing behind it anyway, you can get whatever you want to out of it. And when you do explain to someone what you got out of it they are just going to laugh at you because ha ha, the joke is on you, there wasn't any meaning here after all. They might get that impression.

Final Belief Interview: RIS

1. Well, how are you feeling about things--your teaching, your class--now that you are approaching the end of the year?

2. What seems to have worked well in reading for this set of kids?

3. Were you doing that last year? At the beginning of the year?

--If "no": how did you decide to change? Where did the change come from?

--If "yes": did you try anything new? Where did it come from? How did it work?

4. What seemed not to work too well for this set of kids? Had you tried this before? Why do you think it didn't work?

5. Talk a little bit about reading comprehension. What is it? How is it learned? How best to teach it? (Give them plenty of time for this question.)

6. Is there a student who has really progressed beyond your expectations this year? Probe--describe the kid, progressed in what way? how do you tell? what helped? What did teacher expect of the student?

7. Is there a student who really did not get as far as predicted or at least hoped for? Same probes. . . How did you try to help this student? Do you think some other things might work?

8. A lot of our discussion at our group meetings revolved around assessment. Now that the state tests are over, how are you feeling about testing? What makes grading "objective"? Do you try to be objective? When do you find yourself being subjective? What helps you really figure out when you know how well a student is progressing? Do you use subjective information?

9. We also talked a lot about prevented or encouraged you to do what you believe in in the classroom. How do you feel about that now?

Shift

10. When you first looked at your videotape, how did you feel? Were you surprised with anything that you saw yourself doing? After seeing that, did you do anything differently?

11. How did you feel when you read your belief interview? Was there anything that you saw with which you disagreed? You know, did I really say that? I don't really mean that.

12. What really stands out in your mind as a strong belief about reading that you may or may not have stated in your belief interview?

13. How would you describe the staff development program?

14. Were there aspects that made you feel uncomfortable?

--Probe, "Ya, a lot of people feel that, why do you suppose that is the case?"

15. Were there aspects that were more valuable or fun than others?

16. Do you think you are doing something different because of it? Are you thinking differently about teaching? About reading? About kids? (If no, then, Well how are you thinking about teaching? etc.

17. Lets say there were the opportunity to do the same kind of thing in whatever school you are in next year (for Kim) in Math or Social Studies? What would you think about that? What would you want to do differently?

18. How important are the other teachers in your school to you as a teacher? How would you describe your relationships with them?

19. Anything more that you want to add?

CODING SYSTEM: SECOND TEACHER BELIEF INTERVIEWS
July, 1989

The Teacher

Arxiety	AN
Efficacy/Attribution	EF
Personal Reading	PR

Students

Students in General	S_
Teacher's Expectations for Students	SE
Good Readers	SG
Poor Readers	SB
Average Readers	SA
Learning Disability	LD
Motivation/Self Concept/ Affect	AF

Reading/Language

Reading	R_
Vocabulary	V_
Word	WO
Talking/Communicating	T_
Listening	L_
Learning to Read	LR

RIS

Staff Development--Description	SD
Change in Practice	CH

Teaching/Teaching Reading

Teaching--General	TG
Peer Teaching (Cooperative Learning)	PT
Teaching Reading	TR
Basals	B_
Questioning	Q_
Literature	
Other Texts (inc. library)	TX
Grouping	GR
Grading/Assessment	G_

Other Subjects

Integration	IN
Art	A_
Social Studies	SS
Science	SCI
Writing	W_
Math	M_
<u>School</u>	
School	SC
Other Teachers	OT
Specialists	SP
Principal	P_
Parents	PA

A P P E N D I X E

CASE STUDIES OF SCHOOLS

BY

Meggy Placier

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CASE STUDY: SCHOOL A

I. GENERAL SCHOOL DESCRIPTION

School A was located in a quiet suburban neighborhood of modest ranchstyle homes and new development on the very edge of town. The building was seven years old and appeared very clean and well-maintained. The principal described the school as "middle sized" at 380 students. Enrollment was down in Year 1 of our study, from 600 students the year before, since the school had lost students to a new school nearby (School C). Principal A explained that in a growing suburban attendance area, it was hard to predict yearly enrollment. There were 14 regular classroom teachers, grades K-6, and one LD teacher. Primary and bilingual teachers had the assistance of part-time aides. The average class size was 24.

The school was made up of four connected buildings enclosing a courtyard with a few planters and picnic tables. The office and hallways actually seemed bare and somewhat uninviting to the observers, with little in the way of decoration. The courtyard was well-tended, but did not seem to be used for school activities. But inside the classrooms, there was lots to see: student art and writing, and colorful bulletin boards. Most classrooms were similarly arranged, with desks in groups, and in most classrooms students moved around the room for activities, rather than sitting in assigned seats.

School rules were posted in each room, but classroom management techniques varied. There was a general schoolwide emphasis on rewarding positive behaviors, and the principal made it a point to recognize good student behavior regularly. In general, students were quiet and relaxed during class, and seemed happy to be at school. Teacher-student interactions observed during our visits for observations and testing were consistently positive. There was no evidence of vandalism. With only a few reservations, the classroom observer said, she would recommend this school as a place to teach.

Student Population: Students at School A were 50% Hispanic, 47% Anglo, and 1% each Black, Asian and Native American. Thirty-three percent of the students qualified for free or reduced lunches, a rough estimate of low socioeconomic status. The principal described most families as "upwardly mobile working class to middle class," often first-time homeowners. She figured the rate of student mobility at just below 20%, by which she meant that 80% of the students who were enrolled at the beginning of the year would still be there at the end. Most students came from the immediate neighborhood, except for a few bused in for special education. They scored close to the mean for the entire district on Iowa tests given in April of Year 1 -- neither very high, nor very low.

Despite the percentage of Hispanic students at School A, very few were officially classified as limited English proficient (LEP). One classroom at each grade level provided "bilingual," actually Spanish-as-a-second-language (SSL) instruction, as an

enrichment program highly supported by parents. For the testing phase of our project in Year 2, Principal A decided that the few "Spanish dominant" students in grades 4-6 would not be asked to take the test, which was administered only in English.

In their interviews, the participating teachers at School A did not talk at length about their students. The three who did mention students described them in mostly positive terms. The only exceptions were individual students who, the teachers thought, had difficult lives and needed extra attention and caring. The teachers also expressed satisfaction with their own abilities to manage the classroom and to adapt their instruction to student needs and preferences. They made very few comments, positive or negative, about the students' parents or homes. The interview data were confirmed by the teachers' questionnaire responses. In fact, the School A teachers were the most positive of all groups in their responses to items about their student population.

School History: The principal reported that before she had arrived two years ago, the school had been led by a "very successful, effective principal." While she disagreed somewhat with the former principal's philosophy of education (in particular, her "skills" emphasis), she credited her with having established a positive climate. She also said that though there had been a great deal of staff turnover in recent years, and several of the teachers had little experience, the school had "maintained quality" in its programs. Staff turnover, she thought, was due mainly to the inconvenience of the school's location.

In our meeting with Principal A at the beginning of Year 2, she said that enrollment at the school had climbed back up to 440, due to neighborhood growth. Since staffing had not likewise increased, she described conditions as "overcrowded."

II. INITIAL CONTACTS WITH THE SCHOOL AND RESPONSES TO THE PROJECT

Principal A was the first principal contacted by the researchers, who had heard that she was likely to be receptive. They arranged a meeting with her to explain the project and gauge her reaction to it. The principal volunteered a great deal of the above information about the school at this meeting, and soon adopted the terminology of the researchers, referring to her teachers as "research-based." As she heard the research described, she became very enthusiastic, saying that she would "love to participate," and that "we're the most cooperative group you'll run into!" She described participation as "fun" for her. Thus, there was no issue here regarding access to the school or principal cooperation.

After thinking about the project design, Principal A even proposed that School A would make a better experimental than a control school, because they were "already doing this," i.e., using research-based practices in the classroom. In fact, she warned that "we might not be right for you" because conditions

were so ideal. The researchers arranged a date to meet with the teachers, to see if they would also approve.

Before the teacher meeting, the principal called to tell the researchers that her regional superintendent had officially approved the project, and asked if she could talk with the teachers about it before their meeting. At the teacher meeting, the principal was quite obvious in her support for the project. In her introduction, she described participation as a chance to "make history," and an "opportunity to be lobbyists for change" by using the Illinois reading test before other schools. She told the teachers that she had described them to the researchers as people who were not "stuck," who would be open to new ideas. When PA said we did not want to push the teachers into anything, the principal piped up, "I do!" While she did not hesitate to apply the pressure of her own enthusiasm on teachers, they seemed to receive it fairly well. They joked openly with her about how she had already put their names on the sign-up list.

The researchers described the study in "teacher-friendly" terms, and very thoroughly. But afterwards, the principal remarked that they need not have mentioned the 277 research articles they had surveyed, and other details, since she had told the teachers that this meeting would be brief and cover only the essentials. She explained that the teachers had three meetings that week, and seemed protective of their time. The principal in general seemed anxious for her teachers to have made a good impression on the researchers, and for the researchers to have made a good impression on them, so that they would readily agree to participate.

The teachers' observed responses at the meeting varied. Some were rather slow arriving, and three sat in the back looking at papers and writing through most of the presentation. A young teacher was obviously nervous about being videotaped, and asked how the tapes would be used (as a "bad example" of teaching?). Others asked informative questions about the study in general. One of the veteran teachers, as the principal described it, "bought into the project right away," and after that most of the others followed suit. A male teacher in the back, however, continued looking at his papers. When asked directly about participation, he looked up with a harried expression and said he was "swamped" with work -- but he would sign up. The principal explained, in support of him, that he was involved in a district teacher mentoring program and also the organizer of the student counsel.

The classroom observer said that when she met with teachers to arrange for her observations, they were "friendly, cooperative and open." Only one of the six seemed a little "remote." Another, a long-term substitute for a regular teacher on maternity leave, eventually decided not to participate. The teacher who had seemed reluctant at the initial meeting stopped the observer in the hall and assured her that he really wanted to participate, because he thought that teacher observations were valuable. Teachers seemed anxious to get any feedback from the observer that she could provide, and the principal even called one of the project assistants to find out if and when teachers

would be able to see the results of their observations.

When we met with Principal A at the beginning of Year 2, she continued to be receptive to the project. She was especially interested in seeing how the reading test we were giving would compare with the Iowa tests. She reported that the same teachers would be back this year, and an additional teacher who had not participated in Year 1 wanted to sign up. This was the LD teacher who had expressed interest at the initial teacher meeting. Principal A had some concerns about his participation in the staff development sessions, since he often did not seem to be able to complete his regular duties on time. In general, she said, she was concerned about how stressed for time all of the teachers at her school were this year, with so many meetings to attend. She said that if they had too many meetings, she would usually waive her weekly check on their lesson plans. Though we arranged to meet with the teachers to plan Year 2 activities, Principal A took a great deal of control over coordinating arrangements for the reading tests.

The first Year 2 meeting with the teachers at School A was supposed to be audio taped, but a malfunction made the tape unusable. Only sparse notes were taken of this meeting. The teachers were receptive for the most part, though there was an undercurrent of joking and comments that seemed to have more of a sarcastic "edge" than in the previous year. The LD teacher said that he really wanted to participate, because he was "grasping" for ideas. After some discussion, the teachers were able to come to consensus about a day and time for the staff development sessions. Their schedules did seem very packed.

The project assistants who administered the reading tests reported that the teachers were receptive and helpful. They came away with generally positive impressions.

III. PRINCIPAL A

The classroom observer noted that Principal A, a small fortyish woman with a bright smile, was welcoming and helpful to her. She described the principal as "highly visible" and as "a dynamic individual who has a good relationship with teachers."

Principal Background: Principal A had been a classroom teacher starting in the early 70s. She held a masters degree in teaching, and had earned a doctorate from a prestigious university. Once she had had an intention of becoming an academic, but said, "I decided I liked the public schools a lot better than I liked the university." She had spent eleven years in the district since receiving her Ph.D.: three years with Chapter 1, three years as a specialist in language proficiency testing, and five years as an administrator.

Principal on the Principalship: This was Principal A's second year at School A, and she said that in her first year she could never have handled something extra like a research project. But this year was "calm, predictable, more organized." She was "not a stranger anymore" to the teachers. She also thought that

not many other principals in the district would be interested in participating in a study of instruction. In her opinion, the district trend was toward "symbolic" but not "instructional" leadership.

As for her own style of leadership, Principal A said that she was learning that "you have to work slowly" -- "I can't come in here with all my viewpoints, meeting teachers with all their viewpoints, and say 'O. You're going to do it my way.' That just doesn't work." She contrasted herself with some principals, who "for their own management efficiency, want the teachers to do a very lockstep, cut-and-dry program," perhaps to cope with their own lack of expertise. Her relationships with teachers, in her view, allowed more "give and take."

Principal's School Goals: School A had a school improvement plan, as required by the district, with "writing across the curriculum" as its focus. Principal A had received some dropout prevention money from the district and had decided to use the funds for a teacher inservice on teaching writing. The presenters she chose had "what I'd call a whole language, wholistic perspective," she said. She had been trying to "support" teachers in using techniques for integrating language arts across the curriculum and providing more time for student writing. She also had a personal interest in substance abuse prevention, and had adopted a program on this topic called Project Pride. In addition, she had brought in two "hands-on science programs that emphasized development of language strategies within the science program," and encouraged the use of writing for expression of ideas in social studies and science, rather than the use of objective tests.

For Year 2, Principal A reported that the district had "mandated" teacher inservices on a whole series of topics. The superintendent was implementing a program called "SUCCESS," brought on, in her opinion, due to "panic" over the need for quick improvement. (See Principal Perceptions of District Influence, below.) Principal A would also be continuing with the agenda on her school improvement plan. Inservice topics she had in mind would be writing across the curriculum, fine arts, computers and substance abuse. Therefore, our staff development meetings would be part of a plethora of meetings the intermediate teachers would be expected to attend. Principal A was concerned about overloading teachers with meetings and detracting from their focus on instruction.

Principal Remarks on Teachers and Teaching: Principal A's position on teaching was that "if a teacher is working in a style that feels right to them, they can be successful." It was important for teachers to view themselves as "professionals," in her view, since that term implied a "sense of growth that is inherent." The kind of teacher Principal A was looking for at the school was "somebody who shows initiative, shows resourcefulness, shows ability to get along with others...a self-generator ...who does not rely always on the book." She looked for a "risk-taker to model risk-taking for the kids." She also

looked for certain indicators that the teacher's training had included exposure to the overall philosophy she was aiming for at the school: integrated curriculum, whole language, and a certain school of math instruction.

Principal A held the opinion that teacher change was "a little bit of a mystery, but I guess it boils down to the individual and what they're willing to step out and do. And maybe it's their view of their job." Less experienced teachers, she observed, first had to get a handle on working with the class as a whole, and then moved on to learning how to vary their instruction for different kinds of students. Some teachers, she thought, were quicker than others to take their instruction beyond the textbook. Sometimes teachers identified instructional problems as "materials" problems, and went looking for new materials rather than changing their own strategies.

The district and the school allowed for a great deal of teacher flexibility and innovation, according to Principal A. But some teachers, she said, "still fall back on the way they remember being taught," and conform to the textbook manual even when they know it contains errors. Some teachers "like to be a victim of the system. They like to say, 'my hands are tied behind my back. I just can't do it.' And it's a bunch of balogna. They just want to look like martyrs."

Principal Influence over Instruction and Teacher Change: In the fall, Principal A said, she had given the teachers "a few groundrules for how we were going to do instruction here." She gave them the curriculum guide from the district to use as a base. Their program, in her view, should be based not just "on the books," but on their "personal best ideas." She continued, "Other than that I do not tell people what subject matter they need to teach...I encourage them to vary how they deliver it..."

As for her own influence over teacher change, Principal A said that she did not feel that she could "come in to make big changes...I don't think I would ever come on that way with this faculty." She used her background in reading "but not in a mandated way. Just on an individual basis." She had "not had any major arguments with people over why I don't think they need to hang on to the skills books," but had tried to operate in a "quiet way." She had had "good luck" with referring teachers to other teachers for help. And she especially liked it when teachers came to her voluntarily for advice or invited her in to observe their latest innovations, without fear of failing in her presence.

Though she remarked that the "leadership literature" promoted teacher participation in generating topics for inservice trainings, Principal A said she was generally the one to propose topics to the teachers, based on "school priorities," what she had heard from teachers informally and her own expertise. From her reports, the teachers usually ratified her decisions. Therefore, she exerted some indirect influence over teachers through choosing inservice topics and presenters congruent with her own philosophy.

In her evaluations of teaching, Principal A used the

standard district evaluation form, which combined open-ended observations with a rating scale. She talked with the teacher in advance of her observation and asked for a lesson plan with an explanation of their objectives. The observation was followed by a conference, in which the teacher was able to do as much self-evaluation as possible. The principal used a strategy of having teachers "brainstorm alternatives" in areas which needed improvement, "rather than me being the one who knows and says, you should have done this." In her opinion, this "puts the ownership for change back on the teacher." One area of evaluation she had pinpointed was teachers' tendencies to ask "teacherish" or short-answer questions, rather than questions which generated students' higher order thinking. She was pleased that some teachers had become more self-monitoring regarding this practice.

Principal Perceptions of District Influence: Principal A saw the district moving in the direction of "teacher proofing" the curriculum, due not to the new superintendent (whom she respected) but to his subordinates. For instance, district policy limited how much flexibility she could give teachers in moving away from textbook-based instruction, since certain things were required to be taught. Recent budget cuts had also limited the resources available to principals for improving instruction through inservice trainings. But she also saw some encouraging signs in the whole language emphasis of the district K-3 programs. In general, she approved of the district curriculum, and felt that it had been designed by people who "know how kids learn and what's appropriate for what age."

Every year, the district published a list of achievement test scores by school. When asked about how achievement tests affected instruction at School A, the principal said: "I told them not to pay any attention to them, but I don't know how much certain individuals may worry." She said, "I personally believe that the tests are irrelevant to our goals...but certain individuals are probably suspicious of my attitude and may do more."

In our meeting with Principal A at the beginning of Year 2, she seemed even more certain that the district was moving toward decreasing discretion at the school level. This was despite a counter-trend toward decentralized, site-based management, which she fully supported as the "ideal" way to go about school change. But some people in the district were responding to "external pressure" for improvement in achievement by proposing more centralized coordination of the curriculum. The school board and certain people in the central office, according to Principal A, had been behind formation of a new committee to develop a "core curriculum" of common goals for all schools, which would eventually be linked to criterion-referenced testing. Principal A was going to attend the first meeting along with one of our participating teachers. She said that the teacher was one who could represent her own position well, and she might ask her to continue to attend the meetings in her stead.

Teachers on the Principal: The participating teachers at

School A had generally positive things to say about Principal A in their interviews. They emphasized that Principal A fostered a great deal of autonomy and flexibility in instruction. As one described it, she knew that Principal A had certain opinions about reading instruction, but she "could detect no pressure" from the principal to conform to her preferences. One teacher complained about another teacher's reading instruction, but said, "If the boss sees what's going on, that's between the two of them..." A second year teacher said that Principal A had encouraged her to "trust" herself, and to ask herself, "What do you want to do? What is it that you're looking to teach them?" When Principal A observed that this teacher's reading instruction was limited to the basals, she had gently encouraged the teacher to "try a little bit of variety" in her teaching. A "whole language" teacher said that she appreciated that Principal A would let her "feel her way" through changes in her teaching. In this teacher's opinion, the teacher autonomy Principal A had fostered since she arrived had actually increased the variation among the teachers in their styles of instruction.

The teachers' questionnaire responses bore out the interview responses and our observations. Teachers at School A rated their principal quite high in leadership qualities and frequency of interaction related to instruction. The overall profile of their school's organizational characteristics was somewhat more positive than the profile for all schools combined, on all variables.

IV. TEACHERS AND TEACHING AT SCHOOL A

Observations of Teachers: We had contacts only with the intermediate teachers at School A. What stood out at our initial meetings was the number of young teachers and the number of male teachers in this group. The observer remarked that the male teachers in particular seemed quite "confident." The teachers emphasized to the observer that they were all very different. But while she observed wide differences in teacher "personalities" and classroom management styles, from very "demanding" to very "casual" and "loving," she did not observe wide differences in instructional techniques. Most stuck to the same general schedule (the exception was a "whole language" teacher).

We did observe some evidence of teacher collegiality. Teachers tended to get together to talk after school, and one teacher remarked about how well everyone got along. But when the classroom observer asked directly about teacher collaboration, a teacher looked at her with surprise and remarked that they did not have enough time to plan together.

Principal Description of Teachers: Principal A described her teachers in generally positive terms, and said that in many ways they matched the ideal summarized in the previous section -- though most had too little exposure to the whole language methods she preferred. Her first impressions as a new principal had been of "a lot of young, energetic capable teachers who were fairly,

in some ways, traditional in their approach," and exhibited a "variety of styles." However, their youth and lack of experience meant that they also did not need a lot of "deprogramming" in order to change. She remarked, "I have seen every teacher who is in this school make some changes in two years...no matter how many years they've taught...Most of them have that self-image as professional where they see change as part of the job." This group of teachers also "broke the stereotype that teachers are people who couldn't be accountants or doctors or lawyers." Her highest praise was reserved for two male teachers who were "encouraging thinking" in their students. Her severest criticism was for a female teacher who was on maternity leave for most of Year 1 of our study, whom she had "no confidence in," and who would need to be "monitored" when she returned.

Principal A also described the teachers as working well together, as being "cohesive" and not "se fish with their ideas." A smaller staff this year allowed for more talking and sharing. As she put it, "I feel that the teachers relate unusually well. Occasionally I'll find out that there's a personality conflict or a disagreement among a couple of teachers, but overall there are no cliques and there are no big sides to argue with. From what I hear from other principals, this is a much more cooperative than average faculty."

Most of the teachers, in Principal A's opinion, were anxious for opportunities to learn; she said she never lacked for volunteers for workshops. The intermediate teachers at this school, in her view, were very innovative and "better than the primaries." Though the primary teachers had had many more inservice training opportunities through the district, and as a group had more experience, they were also less willing to change. The previous year, she had seen two young intermediate teachers make many changes under the influence of an experienced, creative teacher -- picking her ideas up "by osmosis" and continuing to use them this year. She felt that "the respect of peers and communication with peers really has a major effect on how the whole intermediate operates here. I love it when it happens that way."

Teacher Comments on Teachers and Teaching at School A: In their interviews, the participating teachers did not offer much in the way of descriptions or opinions of other teachers at the school. In four cases, teachers contrasted their own teaching with that of others. One said that she knew that another teacher was "very loyal to the whole basal reader program" because she had seen him making worksheets in the teachers' lounge, had overheard him teaching in the next room, and had talked with him at times. One said that she knew her teaching of reading had been criticized by another teacher, and that she had had to defend her methods. Another contrasted the teaching of primary and intermediate teachers, and said that in the upper grades, teachers tended to just "go by the book," especially the male teachers who are not very "creative." (There were three male teachers in this group.)

One teacher remarked that it would be hard to describe what

others were doing, "because I'm so tied up in my own room and what I'm doing." The teachers described a only a limited amount of collaboration among themselves, which for the most part consisted in sharing materials or specific ideas. They did not observe each other ("no time" two remarked) and did not plan lessons together. However, two had planned and implemented a joint class project.

On the teacher questionnaires, teachers at School A rated their school as slightly more positive as a place to work, than did teachers in all schools combined. But they did not report an especially high level of teacher collaboration or participation.

V. READING AT SCHOOL A

Observations of Reading: In the classroom observer's view, there was no extraordinary emphasis on reading at School A, but the general atmosphere was conducive to reading and writing. For example, there were none of the popular posters on reading in evidence. The library was comfortable, spacious and arranged for easy use but "there was not much inducement to read," and the observer saw few students there. However, most classrooms had an abundance of literature, in small classlibraries.

In general, the observer noted that approaches to teaching reading were similar, and limited in variety. Most seemed closely tied to the basal reader. But interestingly, the teachers told her that they considered themselves to be quite different from one another. The observer attributed this perception to differences in personality and style, rather than the substance of lessons. Only one teacher stood out as being different in her approach and overall philosophy, and even she, for her observed lesson, used a technique similar to the others. The observer had a sense that this teacher, and at least some others, planned special lessons for their observation days.

The Principal and Reading: Principal A had considerable background and expertise in reading. She held a masters degree in the teaching of reading, and a doctorate in reading, language development and child development. As she described it, her approach to reading evolved from her earlier days in the classroom, when she taught phonics and "assumed that kids automatically would understand what they read," to her present firm belief that a "whole language" approach is best. She said that the "key event" in this evolution was a course from two whole language experts, which "synthesized everything I hadn't learned before in reading and gave me a perspective that...experience has shown me has real validity, and is based on how kids actually learn..." These beliefs had been further reinforced by a colleague in her former position in the district Chapter 1 program.

This principal was very definite and explicit in her position on reading and her objectives for the school reading program. She described herself as "very definitely a whole language proponent, which gives me the viewpoint that where we start from is the function of reading...there has to be a

purpose...My view of reading is driven by the reader as opposed to the text..." In her evaluation of reading, she said, she looked for "kids having a chance to really read...to read connected text and to comprehend, to predict, to expand..." She expressed the opinion that basal readers were inadequate bases for this kind of reading program, and said she would "love" to move the school in the direction of discarding the basals altogether. In her words: "There's nothing worse than a kid having to read a bunch of really short stuff and answer questions at the end."

Principal Descriptions of Reading Instruction: Principal A said that none of the teachers at the school were simply teaching skills as their entire reading program, but in observations "sometimes I see a skills lesson and I don't see any reading going on." She was still not observing the use of content area materials for reading, unless an individual student chose to pursue an interest. A positive characteristic of the intermediate reading program was that the teachers were "not running a lot of low-level reading groups...they're teaching kids at a relatively high level of expectation." But in her opinion students who were above or below grade level in reading might not be getting the attention they needed.

The principal saw the library as a "problem area" for the school. She explained that the school did not have enough students this year to qualify for a full-time librarian. Though their part-time librarian was "excellent" she did not have time to run the kinds of enrichment programs she considered ideal. This deficit was hampering the development of the reading program.

At the end of her interview, Principal A said that being asked to describe reading instruction at her school made her feel distressed at how little specific information she had about it. Principals in the study were provided with copies of their interviews and invited to respond with additions or clarifications. One item on the Response Sheet asked, "What did you learn about yourself as a principal or your views of reading instruction from the interview?" Principal A replied, "In many ways I'm more focused philosophically than I realized, and at the same time less in touch with some of what's actually happening."

Principal Objectives for Reading: Principal A's objectives for the school reading program were for there to be more "integration of language arts across the curriculum, more writing...content area materials as part of the reading program, and literature as part of the program..." Teachers at all grade levels, she said, had requested training and materials for incorporating literature into the reading program. She also wanted to "try to have people view reading itself as their reading instruction rather than thinking they have four days a week of subskills." Her further objective was "to see reading be related to enjoyment, to getting information, to the kid's own life, to their own feelings," and to observe students being "treated as active parts of the process" rather than receptacles

for information.

In her evaluations of reading instruction, Principal A was "really trying to get people to go beyond the manual"; however, she did not "like to put anyone down for using the basal." She allowed that the basal might be used in a "motivating, engaging" way. But sometimes, she told teachers after evaluations, their "materials let them down real badly...they're better than their materials."

Teachers on Reading at School A: In their interviews, none of the teachers would say that there was a "characteristic" way of teaching reading at School A. But most accounted for this by saying that they simply had limited information about what others were doing. They had to make assumptions based on what they had been able to hear or observe about others. The primary contrast presented in these remarks was between teachers who depended on the basal reader ("go by the book" as one put it) and those who were diverging more or less from this approach. One teacher thought that before Principal A came, there was more of a "strong basal orientation," but that since then teachers were diverging more.

The teachers did not mention any schoolwide objectives or special activities involving reading. There was one mention of Love of Reading Week, a districtwide program for promoting reading which inspired the teachers to do special projects on reading. There was one complaint about the limited resources available in the school library.

VI. RESEARCH AND STAFF DEVELOPMENT THEMES

Asked about the relationship between teachers and research, Principal A said, "I think it's like oil and water. I think it's like an allergy." She noted that when the researchers came to present the study to teachers, she "saw some real vacant eyes when PA was talking about the research." In her opinion, "you get a better response if you can set up some mini-opportunities for teachers to replicate some of the research...Don't present it as research." Staff developers should say, "Try this...see if it happens this way with your kids," so teachers could "experience that process of finding out."

As for herself, she "loved research," but had gotten behind in her reading of research journals since she became an administrator. However, she knew about the Illinois test from having attended a recent conference, and was involved in the local and state reading associations. She also had great admiration for certain university professors and their work.

The intermediate teachers had had "practically nothing" as far as staff development recently, until the writing across the curriculum workshops. These had been well-attended and received. Teachers liked being paid extra, and being able to do "hands on" activities -- "not just somebody telling them how." She would advise meeting with the teachers first, before planning our staff

development, to find out what they wanted to learn.

The classroom observer also advised talking first with this group of teachers, because she thought that individual differences could be a factor in the staff development. She thought that the confident teachers in the group would want input and some control over the process. One teacher, who had a Ph.D., might have strong opinions about reading that she could substantiate well, and one male teacher might be a little "resistant," in her opinion. The observer would also involve the principal and the librarian, as two people who would be likely to support the goals of the project.

CASE STUDY: SCHOOL B

I. GENERAL SCHOOL DESCRIPTION

School B was located in an area of transition between an old, low income, predominantly Mexican American neighborhood and new developments of apartments and condominiums. Neighborhood development and desegregation had changed School B from a small school serving a homogeneous barrio on the edge of town, into a large school suffering "inner city" woes: overcrowding, underfunding, disrepair and high mobility. Between Years 1 and 2 of our study, the student population grew from 580 to 633. If rapid growth continued, the principal predicted that the sixth graders would soon be transferred to a middle school.

The school served grades K-6, with a staff of 13 teachers for grades K-3 and 9 teachers for 4-6. Average class size was 25. Because about 50 children, mostly in grades 1-2, were officially classified as "Limited English Proficient," there were four bilingual primary classrooms. One classroom at each intermediate grade was also termed "bilingual," but in these classrooms Spanish was used more as a supplement to English instruction. Primary and bilingual classrooms had part-time teacher aides. Other school staff included a curriculum specialist, an LD resource teacher and two special education teachers, a part-time speech/hearing specialist, a school counselor and a community representative.

The original School B was a small square of classrooms surrounding a courtyard. Recent overcrowding had been accommodated through construction of a new building and the use of numerous portable classrooms. The office and primary classrooms were in the original building, while the intermediate classrooms were in the newer building and portables. The observers noted that School B seemed crowded, confusingly arranged and somewhat disorganized. One called it a "dreary environment" and a "dull place to go." The office was cramped and unattractive. Someone had posted a number of computer-generated signs around the school: "We're Number 1!" "School B Bears!" "Behind every successful kid is an interested parent" and "We have wonderful parents!" But this effort somehow could not make up for the overall physical climate.

The classrooms varied widely in appearance, and the most striking differences were between the primary and intermediate rooms. The primary rooms seemed larger, brighter, more colorful and more comfortably and creatively arranged. The classroom observer noted that the smaller, darker intermediate classrooms were conventionally organized, with individual desks in rows. Portable classrooms were very small and seemed to have been stocked with old or shoddy equipment. Commercially-produced school "art" decorated the walls and bulletin boards. However, two of the intermediate teachers had made the effort to post student artwork and writing in the hallway of their building.

Posters stating school rules were more in evidence in the intermediate building, where they were posted near the entrance and in every room. There were also lists of rules for the bus

and playground. The classroom observer noted that the students she met in the hallways seemed to be "controlled and disciplined" but also "congenial." In the classrooms, the "worst" behavior she observed was whispering and "staring into space." The observer saw no rewards for good behavior, only consequences for rule-breaking.

Student Population: As a result of desegregation, the student population was 62% Hispanic, 28.2% Anglo, 8.2% Black, and 1.6% other minorities. Principal B noted that Iowa test scores tended to decline as one went up the grades; scores reported for Year 1 showed that while third graders scored near the district mean in reading, sixth graders scored far below. Fifty-eight percent of the students qualified for the free/reduced lunch program, a rough estimate of low income. The principal also described the population as highly mobile, though she did not provide us with a specific percentage of student mobility.

In their interviews, four of the six participating teachers mentioned concerns they had about some students at School B. These concerns included students lacking "basic skills," coming from homes where schooling or reading were not considered important, being unsupervised in the neighborhood, and moving away from the school. However, they did not seem to be arguing that such problems were widespread among their students or typical of the school. They seemed to have positive outlooks for the majority of their students. As one teacher pointed out, the students varied widely in family background and culture, depending on whether they were bused in from a more affluent neighborhood or from the barrio. It did seem that most "problem students" teachers mentioned came from the barrio.

School History: Principal B was in her third year at the school. As she described it, she "came into a really bad situation" which had been gradually improving. A fire in one building two years before had caused considerable disruption and resulted in negative newspaper coverage due to parent complaints; and there were continuing problems with heating and cooling. Principal B said, "This school had been ignored too long and people hadn't done the repairs they should have." The cafeteria was so small that lunchtime required four half-hour periods, from 11-1:00. There were not enough restrooms to accommodate the children adequately. In addition, Principal B said there were "a lot of negative influences" at the school when she came. Bad feelings had been generated when she was hired over an applicant who already worked at the school. Parents were "bitter" because of the fire and because School B "had been made a deseg school without any preparation for them." Principal B also complained of high staff turnover; between Years 1 and 2 of our study there were ten new staff members.

II. INITIAL CONTACTS WITH THE SCHOOL AND RESPONSES TO THE ECT

Principal A mentioned Principal B in her initial interview as someone who might be interested in participating in our

project. But even before this, Principal B was known to several of the researchers as someone active in the reading field. From their initial meeting with her, it was clear to the principal investigators that Principal B wanted to participate, but also that she thought the project would have to be carefully presented and "sold" to the teachers for them to agree. For instance, Principal B and the curriculum specialist suggested changing the description of the project to make it sound more descriptive than experimental. They also wanted to be able to say something to the teachers about the short-term rewards for participation, since the staff development would be delayed for two years. The PI's offered to provide the school with some kind of non-reading staff development for Year 2. The curriculum specialist suggested a "cooperating teacher" workshop, and the principal seemed enthused about this idea, too -- especially if the project would pay for substitutes.

Rather than inviting the researchers to attend a staff meeting, Principal B said that she would take charge of doing the initial "selling" of the project to the teachers. VR had the impression that the principal and curriculum specialist were both anxious to participate, but doubted that the teachers would be.

The following week, the classroom observer made her first visit. The principal took her on a tour of the school and introduced her to some of the teachers. Principal B had reportedly told PA that if the first few teachers exposed to the project agreed to participate, the rest would soon follow. The classroom observer did not get the feeling on this first visit that this scheme was working out. When she came a second time to schedule classroom observations with the teachers, she found that most did not feel at all well-informed. They were not resistant to being observed; they simply did not have a clear idea of the purpose of it. The observer could not determine exactly what the principal had told the teachers about the project. She tried to make up a convincing description of the study on the spur of the moment, and had concerns whether her description matched that of the Principal B and/or that of the principal investigators.

The classroom observer decided to prepare some written materials on the project for the School B teachers. Since the teachers at School D had reacted negatively to some of the wording in the project abstract, she decided to reword it to make it more teacher-friendly. Language about "changing" teachers was removed from the abstract. (Ironically, Principal B later told the classroom observer that she wanted her teachers to participate because she wanted them to change their practices, and saw the staff development as a way to accomplish this.)

At the beginning of Year 2, the principal investigators met with Principal B to describe the testing phase of the project. Principal B again chose to inform the teachers herself of this news and to have the classroom observer make individual arrangements for student testing. Principal B, and the new curriculum specialist who also attended the meeting, still seemed enthusiastic about the project, but also remained doubtful of the receptiveness of the intermediate teachers to something new and

different. She said that some of them might even have a difficult time understanding the kinds of questions employed on the reading test. On the other hand, she thought that a new teacher and one of the teachers who had declined to participate in Year 1 would probably be added to our list of participants this year.

The project assistants who administered the reading test reported very different experiences, depending on the teachers to whom they were assigned. Most remarked that students were well-behaved and cooperative. However, in one classroom the teacher was unprepared and disorganized, and in another the observer was struck by different treatment of Anglo and Hispanic students.

III. PRINCIPAL B

Principal B was a pleasant, small woman of around 50 whom the secretaries referred to as Dr. B. The classroom observer did not have many contacts with her, as she often seemed to be away from the school or out of her office and did not visit classrooms during her observations. The observer did see her monitoring student behavior in the hallways. Because she saw Principal B so rarely, the observer communicated with her through notes. Nevertheless, the observer's limited interactions with Principal B were smooth and friendly. One day when she did happen to see Principal B, the principal apologized for not being available, for being so busy.

Principal Background: Principal B had been a classroom teacher for 18 years, in both primary and intermediate grades. During this time, she had taken leaves of absence "to have babies." She had also done some substitute teaching, which she thought was a "good experience" because it showed her that "if you can teach, you can teach, regardless" of the assignment. For a time she had also been a reading/language resource teacher for the Chapter 1 program, "working with students who needed remediation." Then she took a leave of absence to finish her doctorate in educational administration at the university. From there, she moved up in the district, from language specialist, to assistant director for a region of about 35 schools, to principal of her own school.

Principal on the Principalship: Principal B said she had decided to become a principal "just kind of after a number of years in the classroom, just kind of looking at myself one day and saying...I'm not sure I want to be doing this for twenty-five years more." She had also worked under a principal who advised her, "You have a lot of abilities...you're a person who should go on and get prepared." At first she continued to teach while taking a few courses. Then she reached what she called a "transition in life," after which she definitely decided to leave teaching and began "pushing" toward this goal. She did enough coursework for an administrative certificate, but received no response to her applications for administrative positions. So she decided to finish her doctorate, and eventually this had paid off with a principalship.

After three years at School B, Principal B felt that things were going fairly well and that she had "gained some confidence, definitely." She cited the difficulties of overcoming the negative situation she encountered on her arrival and re-orienting herself to a school setting after several years with the district. "The first year was just coping, I think, and surviving. The second year, we made some progress but it was still just going along. This year it feels as though it's been starbursts and everything. So many good things have happened...I think what is happening is that gradually a lot of changes have occurred and it's finally in the third year that you can see it."

Principal B said that her strategy had been "setting up goals for improvement and really emphasizing the strengths" of the school. She also listened to what people had to say, but sometimes had to reply, "I can't do anything about that." For "the first two months what I had so much trouble doing was prioritizing...I couldn't do it all. And that probably is the biggest problem a new principal has..." Some tasks she delegated, and for others she had to decide: "I can do this, but I can't do that." She also determined that she was going to survive the year: "I thought well, folks, even if you don't like it I'm going to be here at the end of the year, whether you are or not, I don't know..."

Principal's School Goals: When she first arrived at School B, Principal B said that the "negativism that I could feel almost as a blanket covering [the school] when I walked in was the hardest thing to fight." Her first priority had been "building looks. Everybody was fussing about the run-down school. When I came the halls were empty...now when you walk down the halls they are full of kids' work...so I worked on just having the environment be better." The "mud bog" of a courtyard had been improved through landscaping and a new, colorful mural.

According to Principal B, another top priority had been staff development. She had "managed to get a couple of days before school starts every year. One year we had seven days deseg gave us for planning. So that was real team building...to get together and look at what we were doing and appreciate what we had accomplished. Then look at what we also wanted to do, towards the future." The emphasis for this goal-setting had been language arts, especially children's writing. "Nobody was doing any writing and now writing is going on in every classroom just about every day."

Topics for other staff inservices had been math manipulatives and the State essential skills for language arts. Principal B had also been working on improving instruction through introduction of the Essential Elements of Instruction (EEI), which she felt gave her a vocabulary for talking about instruction and evaluation. She saw a need for concentrating on improvements in teaching, because "academic achievement and good teacher instruction are so linked." For next year, "delivery of instruction will be an emphasis, along with inserting some thinking skills questions, questions that require thinking." In addition, she said, "I push science a little bit more this year,

too."

Principal B had devoted much effort to promoting writing at her school. She wanted every teacher to include writing in her lesson plans every day. Every child had written a book for Young Authors Week, for writing contest, and the two winning writers from each room met with a "real" author from the community.

In summary, Principal B said that her aim was to "keep on making them feel good about being here -- the teachers and the kids." As a morale-builder, she had emphasized the school mascot, the School B Bears, on t-shirts and a take-home school newsletter. "We keep emphasizing that we have a wonderful program...a lot of things to make it really nice to be here and to make people feel good about themselves."

Principal Remarks on Teachers and Teaching: After observing the reactions of teachers at School B to having a new principal, Principal B had decided that "those that go into teaching are kind of security conscious and sort of real caring people and feeling people and they really don't like change, so they react." Teacher "reactions" to the change, she said, had set off a chain of reactions from children and parents. But a new principal had to introduce change, because "if you don't change, you're actually going backwards, because time and everything is moving forwards." On the other hand, a principal had to understand that "teachers need a lot of support. You can get in that classroom and feel isolated and nobody cares how hard it is."

According to Principal B, "Having a group of teachers is almost like having a group of kids. You've got your super achievers and you've got your ones that walk along the bottom. You've got the ones that need to be patted all the time." Her biggest complaint about the "bottom" teachers concerned those who talked too much. This was because "the kids get lost in a sea of words. And when they're teaching...the kids will go away. Their minds will just ramble and play after so long. Because you can follow it for so long and then...your mind just splits." Principal B was emphasizing (though not "prescribing") EEI as a way for teachers to organize their talk into a coherent pattern. In her words, "I want a lesson with a beginning, a middle and an end." She thought that teachers with little confidence particularly needed such a structured approach to teaching, at least initially. "Some of them [need to learn] to be just real clear on how to present things really clearly, instructionally, and then move on to some of these other creative strategies."

The kind of teachers Principal B looked for when hiring were those who could describe in detail what they would do with a particular theme or topic, how they would plan a unit which would include "some coordinated activities across subject levels." She would also like to hear how they would teach a new skill to the class. In addition, she wanted "someone who has some creativity to them" but who also conveyed the idea that "academics is important." She had a higher estimation, in general, of primary teachers' skills, and wished that all beginning teachers entered at the primary grades and then worked their way into intermediates. This way, the primary style of teaching would be

extended upward through the grades.

Principal B had conducted staff development herself, and most of her remarks about teacher change had to do with how to conduct these sessions effectively. These remarks were also very revealing of her positions on teaching. She thought that when teachers were asked what they wanted to learn, "They won't come up with many things except the tried and true things that they already know. Because they really don't want to know that they don't know. They really don't want to have someone say they're not doing it right." What she thought teachers needed was the introduction and demonstration of "something brand new...that would capture their imagination." For example, she thought that introducing a literature-based reading program, with all new materials and techniques to try out, would be the key to breaking their "habit" of depending on the basal readers.

Principal Influence over Instruction and Teacher Change:

Principal B said that when she arrived, "actually I came in and tried not to make too many changes." Even though she saw many problems at the school, as she put it: "What I did was I came in and just tried to sit and watch and everything I could, I praised. I mean I really did kind of ignore some negatives going on or some things that I would not think were in the best interests of kids...because I wanted to set up a feeling that I wasn't a negative person, that we could overcome that." She had taken a slow approach to needed improvements in teaching, offering "mini" teaching tips and handouts (especially for reading and writing) once a month at faculty meetings and writing down "suggestions" for teachers based on her observations.

She had introduced EEI because "I had a couple of teachers that I didn't think were doing quite as well as they should, and for the good teachers, it wasn't much different...I'm not insisting, I'm using that framework and asking them not to be real prescriptive about it, but to be aware about...good direct instruction lessons..." She had asked one of her weaker teachers to obtain more extended instruction in this method. Principal B said that she made most of the decisions about the staff development teachers needed, but she had also taken a survey of the teachers, of "areas they felt we should work in," and had tried to plan inservices based on their suggestions.

As for her role as a teacher evaluator, Principal B said that in her first year "even on my observations I was looking for strengths" rather than coming down hard on teachers' weaknesses. Since then she had adopted the EEI format, which she thought "gives you a good vocabulary to interact with...Now I can say, these things are good, how about trying this. Or these things are good, you need to use them on this." With EEI, she could explain precisely what she wanted to see in a lesson. As the district required, she completed a formal observation of each classroom each semester, and prepared a written report at the end of the second semester. For the written evaluation, she said she would "write down that this is an area that you need to improve, if I feel that they haven't done too much" [to change their practices]. In addition, she expected teachers to have a "real

open door policy" with her for informal observations, and reinforced this by going to the classrooms to check lesson plans, rather than having them turned in to her at the office. This routine allowed her to briefly observe each teacher regularly and to "make some comment about the classroom." For teachers that "need some improvement," she said, "I'll get in and try to check them a little more often."

In-services were another way for Principal B to influence instruction. To increase the impact of inservices in science that some teachers had attended, Principal B was "requiring" them to "have at least one hands-on science experiment for every science unit they teach." She actively sought out presenters, especially from the state level, to work with her teachers. And she attended inservice sessions with them, because "I told them I want to hear what you hear and I'm going to expect to see it in the classroom."

However, Principal B said of her approaches that "I don't see it taking hold" and "I can't say I always get a good sense that they make the change." She had a limited amount of time for visiting classrooms and following up on her suggestions or inservices. In addition, paying more attention to certain teachers meant paying less attention to others. In the meantime, she said, "I just have to trust that the teachers I feel who do a good job, that they're continuing to do a good job."

Principal Perceptions of District Influence: Principal B, like several other principals in her district, noted the positive effect of the district's K-3 department on the primary program in her school. But little had been done for the intermediates, which were a "wasteland" as far as district services were concerned. She thought the district needed to provide something for the intermediates on EEI and to develop a "coherent sequential program development for intermediates." She also wished that the district "would give me a couple inservice days for my intermediate teachers every year. I could do it with \$820...then really kind of let me plan it and provide resources and everything. But the money won't be there this next year."

As for district help with the reading program, Principal B noted that they "should be doing something about updating strategies in reading," but the district assistant director for language arts and reading and her small staff were spread too thin to offer services at the school level or "to make much of an impact on the schools." In addition, this department was preoccupied with an upcoming adoption of new reading textbooks, and "since there is supposed to be an adoption coming up, it's like people kind of hang out and haven't done much" about improving the reading program. She predicted that the district adoption would result in a language arts program with a literature base, which she favored over the current basal reader system.

On the other hand, district emphasis on standardized achievement tests, according to Principal B, did have a clear impact on the school reading program. It meant that "I'm not going to say we throw out the skill teaching...they really need

to be teaching the skills." The teachers could explain to the students that skills teaching was necessary because of the test: "They need it for a purpose. They need to know the purpose is they're going to be tested." When she heard about the reading test the project was planning to administer, which tested higher-level skills, Principal B said she was interested in such alternatives to the Iowa test. Educators, she said, needed something they could "sell" to the public as a replacement for the Iowas.

Teachers on the Principal: The participating teachers at School B had very little to say about the principal in their interviews. There were no direct or extended remarks about Principal B, only passing comments. A beginning teacher remarked that the principal had given him an option of visiting other schools to observe teachers, but he had felt too disorganized to take advantage of this. Another teacher said that the principal was the one who had reorganized the school into "straight grades" rather than grade combinations, and that she knew that Principal B "really stresses group work and cooperative learning." However, she added, teachers did not always try these methods, because whole-group instruction was "easier."

On their school questionnaires, teachers at School B rated Principal B slightly more positive than the mean for "effective leadership" for the total sample. Therefore, their relative silence regarding Principal B in the interviews would not appear to be due to negative teacher-principal relationships.

IV. TEACHERS AND TEACHING AT SCHOOL B

Observations of Teachers: We had contact only with the intermediate teachers at School B. The classroom observer had the impression that the teachers for the most part were "just doing their jobs." They did not complain about the school, but on the other hand they did not seem very enthusiastic about their work. In the observer's words, "their descriptions of their work seemed highly mechanized and unanimated." Only one teacher seemed to have a lively interest in her students, as demonstrated in her friendly, personal interactions with them. The observer was also concerned about teacher expressions of low expectations for the students, and the "prejudicial" comments one made about black students being slow learners.

The classroom observer reported almost no instances of teacher interactions or collegiality, other than some quick banter in the office first thing in the morning. On planning day, most teachers remained in their classrooms alone. One teacher remarked that they used to get together on planning days, but that now they had too much expected of them to have time to "visit" with one another. They did not seem to collaborate in their planning, share materials, or combine their classes for any activities.

All teachers used similar strategies for teaching reading, related to their reliance on the basal reader, though their styles differed somewhat. In general, the classroom observer

noted that "much of what I observed at School B is not teaching but rote recitation from books." One teacher repeated the same lesson several times, over the complaints of the students. The one teacher who did more to engage students in personal conversation also elicited more elaborate, creative responses from them in reading lessons.

Principal Descriptions of Teachers: In her descriptions of the teachers at the school, Principal B consistently distinguished between primary and intermediate teachers; as she put it, there was a "great big gap" between the two groups. She said that the intermediate teachers were less positive and flexible than the primary teachers. There were some veteran intermediate teachers who "could still grow and take advantage of the new things we've learned about teaching," but they usually raised objections when she suggested changes in their instruction. In contrast, the primary teachers would say, "Wow! Great!" to new ideas. They had also had many more opportunities, through the K-3 program, to learn about new teaching strategies.

Principal B described the primary teachers as trying to "figure out the developmental steps" and individual needs of each student. She described the intermediate teachers as saying to students: "Here's the material. I'll help explain it to you and then you need to get it. It's up to you." She added, "they're getting a wider range of abilities, more deficits, and they still try to teach [the students] without giving them extra help." Moreover, "I think you'll find the majority, not everyone, but the majority have them all in the same book at the same place and the same time..." She described one of our participating teachers as so limited that he needed to follow the teacher manual by rote. She had been close to letting him go, but since he had worked very hard and applied her suggestions to the letter, she was giving him another chance. Two of the teachers in our study were the ones she had referred to as "talking their students to death."

Because of the gaps in approaches and attitudes between them, Principal B said, the primary and intermediate teachers "hung together" as separate groups. They did not "fight each other," but they neither did they communicate or collaborate. Social relationships among the group of intermediate teachers, however, were "actually pretty good." They especially enjoyed the few opportunities they had to meet away from the school, for meetings or staff development. She had noticed that the teachers were most likely to coalesce when there were problems at the school that needed solutions, such as bathroom vandalism, noisy hallways, or one teacher's objections to the new mural. But this cooperation did not extend to discussions of instruction. According to Principal B, most of the teachers made their decisions about instruction in isolation, behind closed doors.

Teacher Comments on Teachers and Teaching at School B: In their interviews, the participating teachers said that for the most part they did not often talk with or observe other teachers at the school. Reasons included lack of time or opportunity,

isolation, and "competitiveness" which seemed to arise in discussions about teaching. What they knew about others' teaching seemed to derive from inferences rather than direct contact and discussion. One teacher said that she and two other colleagues often met for lunch, but they deliberately avoided talking about their work. The exceptions were pairs of teachers who had some commonality, e.g., being bilingual, using cooperative learning, and being male and sharing coaching duties. The teacher who had done the most observation of others was a beginning teacher who said that he really needed to consult with other teachers for ideas about teaching, and seemed to gratefully appropriate every good idea he encountered.

On their questionnaires, teachers at School D indicated that they had a high degree of autonomy, but that their instruction was well-coordinated. On most scales, they ranked their school close to the mean for all schools as a work environment. Their only outstanding concern seemed to be a lack of resources, such as instructional materials and equipment.

V. READING AT THIS SCHOOL

Observations of Reading: From the classroom observer's notes, it appears that there was more emphasis on writing than reading at School B. Student writing was posted on the walls, and Young Author's Week was a big event at the school. In fact, the principal's writing contest aroused some rivalry among the teachers.

The library was located in the intermediate building, so that it was easily accessible to the participating teachers. It was "very open and welcoming," and staffed with a full-time librarian and two aides. Classes had regularly scheduled times for visiting the library, during which the librarian delivered special lessons. After the lessons, students were free to choose their own books, and some worked on computers or special projects.

In all classes observed, reading was scheduled as the first lesson of the day, in most classes as a whole group activity. Most observations were of vocabulary lessons, followed by oral reading from the basal and teacher questioning. All teachers seemed to take their questions from the teacher's manual of the basal reader series. Only one teacher asked questions which went beyond this, to relate the students' lives to the story.

The Principal and Reading: Principal B had considerable background and experience in language arts, through her work as a Chapter 1 reading/language resource teacher and district language arts specialist. In graduate school, she had co-taught a language arts class with Roach VanAllen, of "language experience" fame. Her doctoral dissertation had been written on the topic of children's writing, her minor area, rather than educational administration. She was also past president of the state reading council. She described herself as "pretty active in the field" of reading, not doing many conferences or presentations since her principalship, but remaining a member of the state reading

council and retaining her interest in current developments.

Along these lines, Principal B reported that she and two other principals, who were "strong reading people" and whose schools fed into the same magnet high school, had been meeting recently to "update themselves" in reading. They met "practically monthly" to "build up our expertise in reading and what's happening in reading. Then [we're] trying to come back and pass on some of that information to our teachers as instructional leaders."

In her work for the district, Principal B had participated in the process of adopting the current basal reading series and had been assigned to inservice teachers on how to use the new texts. She said that in these sessions she had emphasized teachers' need to "update their reading strategies." However, she was not sure how much effect this message had, because the inservice was a "one shot deal." Since then, she seemed to have become less supportive of the basal and more supportive of something "totally different," such as a literature-based program. From her accounts, she had persisted in presenting teachers with alternative strategies for teaching reading which would add "variety" to the basal program, and they had persisted in adhering to the limited lessons in the manual. She would not advocate "throwing out" skills lessons altogether, since achievement tests measure these skills, but she would not label skills lessons, workbooks, and spelling "reading." She advocated direct instruction in language skills coupled with a literature-based program which would "let reading be reading."

In addition, Principal B had become enthusiastic about the Reading Recovery program, which promised great benefits from early identification of children with reading problems and intervention with intensive tutoring. The program's developers claimed that after this intervention, students would never again need remediation in reading. She even went out of her way to copy a recent article on this program for the interviewer.

Principal Descriptions of Reading Instruction: Principal B said that the teachers were, despite her advice, "still following the basal reader, which has them question [the students] to death." "They're following the teacher's manual. They're still, even though I've talked to them about it not being the best way, listing the words and looking them up in the dictionary and writing the meaning." On the other hand, she thought the intermediate teachers did use the library "very well." Since it was in their building and the librarian was "open to having the kids in there," they could go "pretty much whenever they want."

Asked about approaches to "above" and "below grade level" readers among the teachers, Principal B replied that for the first group, most teachers assigned extra book reports. Some also assigned extra writing or sent students to work on the Bankstreet Writer program on the computers in the library. These approaches were "very informal" and depended on the individual teacher. As for "below grade level" students, she said some teachers used grouping, and some tried extra tutoring. At the beginning of the year, the teachers had to list all of their "at

risk" students, who then received tutoring time. They also tried to "work up some basic word lists" for these students. In the bilingual rooms, the bilingual aide was often assigned to do extra reading practice with them. "Those that are seriously deficient" had been tested and provided with LD services. Principal B also identified one group of students who "kind of keep pumping along" -- "the famous gray area kids that are kind of borderline. They don't get much help."

Principal Objectives for Reading: As mentioned earlier, Principal B had been presenting mini-lessons for teaching reading in some faculty meetings. Two topics she mentioned were "prior knowledge and how important that is" and "word play and enlarging vocabulary." In her evaluations of reading instruction, she "tried to make suggestions and give teachers specific strategies to use" to improve their teaching. But she was not sure that the mini-lessons were "taking hold" or that the changes she "suggested" in her evaluations were happening. She wished she could do something more ambitious, and became very animated as she talked at length about her ideal reading program. "To me," she said, "they could do away with our English books and our spelling books and our handwriting books and then come up with some sort of a strong literature based reading program...The thing I'd really like to be doing...and see this takes money...I wish we could get a couple classroom sets of literature, your paperbacks." The sets of books would be the basis for completely revamping the reading program, into a literature-based approach.

To introduce the new program, Principal B would "do inservicing on all the good things you need to do when you're reading." She would distinguish these "reading" lessons from the "skills" lessons, which would still be necessary because of the system's emphasis on achievement tests. Teachers might use some of the stories from the basal reader, but not the questions or activities. Instead, she would recommend prediction activities, content area reading, vocabulary use and word banks, summarizing or retelling stories, linking writing and reading, using the newspaper, self-choice reading, and at least thirty minutes a day of uninterrupted silent reading.

In addition, Principal B said she would like to see the above-grade-level readers be placed on a "book explorers" program through the library, and the Reading Recovery program for her primary grade students "at risk" for reading failure. She hoped the librarian would develop more special programs for reading promotion, and was disappointed that this had not yet happened. In general, then, there was a great distance between Principal B's descriptions of reading instruction at her school and what she would like to happen. Of all of her reading objectives, the most likely to be achieved was the implementation of the Reading Recovery program, through Chapter 1 funding. However, this would again concentrate change in the primary, rather than the intermediate, grades.

Teachers on Reading at School B: In their interviews, most School B teachers said that they did not know, or could only

guess, how others were teaching reading. Staff turnover seemed to contribute to this situation, since three teachers mentioned either being new to the school themselves or not being familiar with the newer teachers. The beginning teacher who had done some observation noted that "some go by the book completely, some of them diverge." The other issue which came up was whether or not teachers had reading groups -- an issue which according to one teacher was not a comfortable one to discuss. Two teachers wondered how others had arranged their groups, but apparently did not want to ask them directly.

The teachers did not have much to say about schoolwide policies or programs for reading. One mentioned that it was a "school policy" to have students read a great deal, and there was one mention each of Young Authors Week (a writing promotion activity) and of the librarian.

VI. RESEARCH AND STAFF DEVELOPMENT THEMES

Asked about the relationship between teachers and research, Principal B said that teachers would need some "background knowledge" to understand what research was saying, and then some concrete research-based activities that they could put into effect in the classroom. She explained, "First of all, I don't have my teachers getting journals and sitting down and reading research. But I think they're kind of open to hearing about it now, because I've talked about it enough...I don't see them rejecting it or immediately closing down because you start talking about what research says...But what you have to do is go the next step. Here's what the research says, and here's what it means. In the classroom you do this and this and this. Now let's try it." Principal B also remarked that she was familiar with the "people at the university" who conducted reading research and who were working on our project, and "highly respected" them.

Principal B had a great deal to say about staff development, and seemed to view herself as having expertise in this area. She advised that the staff developer must do a "needs assessment" of "where [the teachers] need help and they don't really think so." That is, she argued that teachers would not identify what they really needed to learn. She thought that to actually change teacher's habits in reading instruction would require more than mere introduction of new techniques (which she had already tried). In her opinion, only something "brand new," like the introduction of a new literature series, would "capture their imagination." The staff developers could use the new books to introduce new ways of teaching reading, have the teachers practice these in the classroom, and "then, hopefully, if they've had the practice using it, they won't need to go back to the basal readers and do the same thing..." She also recommended holding the staff development during a whole day of released time, in a pleasant atmosphere away from the school.

At inservice trainings, Principal B recommended that the trainer should demonstrate a lesson and then observe the teachers' implementation. "What you need to do when you're demonstration teaching," she advised, "is to make sure that you

give them some sort of a form to identify with. What are the strategies you're using? Do they feel as though it's working well? Make them attend." "So if you have like a response sheet or something and then you talk about what you were trying to do and what she saw. Because what a teacher sees and what you're trying to do may be two different things."

Because of Principal B's preference for interceding between the researchers and the teachers, the two groups had never met (by the middle of Year 2). Therefore, we had little sense of this group of teachers as a group. Based on her contacts, the classroom observer recommended that the staff developers should approach the group "carefully." She sensed some fear among certain teachers of being told (or perceiving that they were being told) that they were not teaching correctly. Some of the teachers appeared to feel "devalued" and "disempowered," and a couple did not seem to have the "tools" they needed to do their best work in the classroom. She recommended that the staff developers make an extra effort at this school to emphasize that teachers would be actively participating in the staff development, and that neither the researchers nor the principal would be mandating particular changes in their instruction.

CASE STUDY: SCHOOL C

(Note: As the case study will explain, there were special circumstances at School C during Year 1 which contributed to both low teacher questionnaire responses and teacher turnover. Eleven of 16 teachers returned their questionnaires, and of these several left at the end of Year 1. Only two of the original five participating teachers returned for Year 2. This case study does not incorporate teacher interview and questionnaire data from Year 1, since there are questions about its validity for Year 2.)

I. GENERAL SCHOOL DESCRIPTION

Newly opened in Year 1 of our study, School C was located on a gravel road on the edge of town, only about a mile from School A. In fact, the two neighboring schools were architecturally identical. The neighborhood nearest the rather isolated-seeming school was a new housing development of two-story single-family homes. Many of the school's 460 students were bused in from other surrounding areas. The full-time staff included 15 regular classroom teachers for grades K-5 and 2 special education teachers with self-contained classrooms. Part-time staff included reading, speech/hearing, and gifted program specialists. Bilingual classrooms and classrooms with over 25 students had part-time teacher aides. Average class size was high for our sample, at 28.

The same classroom observer worked at both Schools A and C. School C appeared very new and stark to her when she arrived in January. Teachers sometimes displayed student work just outside their classroom doorways; otherwise the hallways were bare. The observer was greeted in the office on her first visit, but after that felt virtually ignored by the office staff and the principal. She noted that teachers and students seemed "reticent" in comparison with those at School A.

In contrast to the bare exterior and hallways of the school, in their classrooms teachers had begun to make themselves at home by posting lots of materials and student work on the walls. The same list of rules was displayed in almost all classrooms, although teachers had different ways of presenting them. There was no evidence of any schoolwide emphasis on rewarding positive student behavior, or any other emphases. The principal described the school in terms of her future hopes for the staff and curriculum. In short, since School C was brand new, there was something about its climate, organization and program that had not yet "jelled." The observer noted: "Everybody at School C keeps using the excuse that it's a new school."

Student Population: The students at School C were 48% Hispanic, 45% Anglo, 4% Black, 2% American Indian, and 1% Asian. Forty percent of the students qualified for free/reduced lunches, a rough estimate of low socioeconomic status. The principal did not comment about the student population in her interview, but one teacher speculated in a talk with the classroom observer that in most student's homes both parents worked to support their

investment in a new home. The teacher complained that television dominated School C students' home lives, and this made it difficult to teach them higher-order thinking; but the observer noted that this is an almost universal complaint of teachers in any neighborhood.

School History: Such a new school might be assumed to have a very limited "history." But School C already had its share of troubles. What we later learned about School C may also help account for the somewhat unenthusiastic, strained atmosphere the observer experienced. During the first week of school, a School C student was struck by a school bus and injured. In the second semester, School C became the subject of several news stories because of health problems among students and teachers. The district attributed these problems at various times to sewer gas, mold, pollen and the cooling system. But actions taken to address these causes did not seem to help, and parents were becoming angry. At the end of the year several classrooms were moved to other schools. Therefore, our project and its theme -- the improvement of reading instruction -- were not a central concern of the principal and teachers at School C during Year 1, in comparison with this public health crisis. In fact, at the end of the year there were rumors that School C would not reopen in the fall.

The district continued to investigate the problems at School C through the summer. Officials announced that they had found and corrected the difficulty, and that the school would reopen. Parents were given the option of sending their children to School C or having them bused elsewhere. When the principal investigators visited School C in September, they noticed that the office had been quite attractively redecorated. When we asked Principal C how things were going, rather than referring to last year's crisis, she began with how well this year had begun. With neighborhood growth, enrollment was actually up, and a new fourth grade classroom had been added. The intermediate teachers all had even higher class sizes this year.

At the end of our meeting, Principal C finally talked about how hard Year 1 had been, with so many upset parents, and TV and newspaper reporters swarming around the school. One parent had complained that there could be "no learning going on" under these conditions, but Principal C maintained that the teachers had actually done more than expected, had performed above and beyond the call of duty. Some teachers had tried to hide their illness, and did not leave the school until she required it. This year everything seemed back to normal, and Principal C seemed relieved.

II. INITIAL CONTACTS WITH THE SCHOOL AND RESPONSES TO THE PROJECT

The principal investigators had met initially with the principal of School C to describe the project, but they had been almost certain from her cool response that the school would not participate. They had decided to involve School F instead. Therefore, they were surprised when the principal later called to

say the school would participate, and they had no idea on what basis this decision had been made. The principal must have described the study to the teachers herself, because her next step was to arrange for the teachers to meet with the classroom observer in the teachers' lounge, to set up observation appointments.

The classroom observer reported that the principal met her on her first visit, and conducted the initial teacher meeting very efficiently, but after that point did not go out of her way to speak to the observer or inquire about how she was doing. She found the teachers to be friendly and cooperative, though not as "enthusiastic" as at School A. They asked her no questions about what their participation would entail. One mentioned that VR had been his student teaching supervisor, and he had been eager to participate when he saw her name. Another, a beginning teacher, said he was anxious to see the results of his observations. The observer had the impression that the teachers planned special lessons for her observation days -- lessons which did not match the descriptions they had given her in their preobservation interviews. In fact, one teacher told the observer (not unkindly) that she had expected her on another day, and had planned a special lesson for that day. The lessons also seemed shorter than the observer had anticipated.

Questionnaire responses from teachers at School C were low, perhaps due to the extenuating circumstances described above. No one at this school took responsibility for collecting the questionnaires, as someone had at each of the other schools. A teacher from School C, who was taking classes with two of the project assistants at the university, remarked to one of them that she hoped the assistant who distributed the questionnaires had not received a bad impression of the teachers and their morale.

VR and PA met with Principal C in September for Year 2 planning, to decide what to do about the testing phase of the project and how to handle teacher turnover. There were three new 4-5th grade teachers, and Principal C explained that they were beginners, with 1-2 years of experience. She did not know how much they might have heard about the project, though she had mentioned it to at least one of them. She planned to distribute copies of the timeline and abstract to them, and also thought it might be best to get the group together with VR and PA for a review. After some discussion, she decided that with so many new teachers, it would be best to postpone the staff development until the spring semester. She said that she would try to keep the spring schedule open, so that teachers would have plenty of time to devote to the project. She described the project as a "change process" that she really wanted teachers to follow through with. Rather than presenting it to the new teachers as an option, she said that she would tell them it was "part of the job."

The classroom observer arranged for administration of the reading test with the teachers individually. One of the two remaining participating teachers from Year 1 facilitated the scheduling. Project assistants who administered reading tests

reported that the teachers were receptive and helpful. One new teacher said she was anxious to participate in the project, since she needed help with planning for a large class. The week of the test, students were spending most of their days with a special district fine arts team. They seemed restless and asked many questions, and several observers noted that the teachers were challenged to keep them on task.

III. PRINCIPAL C

Principal C was a Hispanic woman of about 40 who gave the impression of being quite pleasant, but also rather guarded. The principal was rarely visible to the observer on her visits to the classrooms. The observer concluded that "she's probably very competent and she's probably respected. She's probably just not an extroverted type of person, and therefore I wasn't privy to what was going on. If she were approached on a professional basis, she might be more open." The observer also did not see much evidence of interactions between Principal C and our participating teachers. They did have staff meetings one morning every week, before school. And there was one incident in which the principal delivered a planter to a classroom in which two teachers were just beginning an experiment with team teaching. The teachers said that they knew the principal had been a team teacher before, and wanted to encourage their efforts.

When another project assistant called to arrange for her interview, Principal C was very gracious and cooperative; and at the interview itself, she was positive and articulate in explaining her plans for the school, giving no hint of the health crisis which would be reported by the media in the next few days. By the end of the year, when the crisis was in full swing, she seemed determined to weather the storm with composure, but she also seemed exhausted. She described Year 1 as a "bad year." Therefore, in interpreting the observations of the principal and teachers at this school, it should be taken into account that this was not only the first year of the school's operation, but an extraordinarily stressful one, as well.

Principal Background: Year 1 was Principal C's nineteenth year in the district. She had spent 14 years as a classroom teacher, six of these in an open classroom in the district's first "exploratory learning center." She described this experience as "really exciting" because it included team teaching, which "allowed her to delve into one curriculum area." Her area was drama, which she had been skeptical about at first, but which "turned out to be a really powerful area of curriculum" because she could "integrate a lot of subject areas into it." After this experience, she worked for Chapter 1, where she said she learned about the advantages and disadvantages of federal programs and saw how deseg schools could "bridge two communities." Following this, she became a principal. Her first four years of the principalship were spent at the same exploratory learning school where she had taught before. Then in her fifth year she was assigned to be the first principal of

School C.

Principal on the Principalship: Principal C said that after four years of experience, she was "more assertive because I know what I want in terms of a direction for a staff...a vision or mission that I have... and it's easier, because it's a new school." She felt that as a principal she had a "better sense of direction" than a classroom teacher, because she had an overview of the "total school curriculum, and what we need to do as a total school, and what teachers have to do as individuals in their classrooms." She added, "It takes a lot of working together." Principal C consistently illustrated her points in the interview by describing what she would say to others. She felt she had to take the initiative as a principal, to "be the one to say, 'what do you need in terms of materials?'. . 'how's it going?'" She seemed to present herself, therefore, more as a thoughtful inquirer than as a directive "boss."

Principal's School Goals: As principal of a new school, Principal C appeared to have carefully considered how her initial goals would chart the long-term directions of the school. She did not have an unlimited choice of teachers (because teachers with seniority had first choice of new positions), but she had some discretion in deciding how the wording of the advertisement would read. This wording reflected both her image of the "ideal teacher" and her goals for the school. She had asked for computer literacy; evidence in college transcripts of reading courses; experience with counseling, art and music; and previous involvement in staff development and team teaching. She had specified that language arts at the school would involve wholistic writing and language experience, and that they would be "delving into different models of reading."

Another goal was to eventually match teaching styles with children's learning styles. She hoped to develop three curriculum "strands" at the school: bilingual, "open" and "traditional" (her terms). Teachers and students would be matched with one of the three. However, she also wanted a "core curriculum" as a "focus" for everyone. Reading was one area of emphasis. She had selected the "reading and thinking" program from the offerings of the district K-3 department for primary teacher inservices this year, and had been able to extend this program to the intermediates through the use of dropout prevention funds. As far as instruction, she said she wanted to do away with some of the differences between primary and intermediate instruction, and to encourage a "theme approach" which used textbooks as just one of many resources for teaching.

Principal C had a strong emphasis on assessment of students, as a basis for student placement and intervention. She said, "We've got to come up with some assessment tools, and I don't care if it's standardized tests, though I hope it's not the only thing." Perhaps the teachers would come up with some "local measures." She wanted her teachers to do "advanced testing" of children at the beginning of the year as a basis for developing specific intervention plans. For the primary grades, she had

hired a part-time teacher to work with children identified as "at risk."

Principal Remarks on Teachers and Teaching: In line with the above goals, Principal C seemed to have very specific ideas about what she expected from a teacher at School C. But she also had respect for individual teacher "expertise." She said, "I want all my teachers to see that each one of them is an expert, and that no one method is the only method to teach or the only method to use with children." Principal C hoped that teachers at the school would share their expertise with each other. She hoped to see a high level of interaction among teachers, and to see teachers being "their own problem-solvers." Ways to facilitate this, she thought, would be to give teachers released time together or to assign them to teams or departments.

Principal C expressed more general approval for primary than intermediate teachers. She commented that "probably every administrator will say definitely there are differences between primary and intermediate teachers...one of my visions is to do away with some of those differences...what was good in primary is still good in intermediates, and what I see in intermediate is more of the paper/pencil, textbook tasks, where I still think children need more of the hands-on." She said it "broke her heart" to go into intermediate classrooms and observe a very limited range of instruction. In her opinion, intermediate teachers also recognized this problem, since they "as a whole aren't that pleased" with their usual practices, which become "blah" for them at times.

Teachers, Principal C argued, could be open to change, but with "a lot of them it's just either lack of knowledge or it is pretty frightening -- 'You're asking me to revise my whole program.' " In order to change, teachers needed a "structure, not just a philosophy, to show them the way to change." Principal C seemed to feel confident that she could provide such structure and direction. She said that objectives for change would most likely come from her, since in her opinion teachers had a hard time being specific about assessing their own needs and deciding what they wanted to learn. But she also repeatedly stressed the value of teachers learning through their interactions with each other.

Principal Influences over Instruction and Teacher Change: Related to her position on teacher expertise, Principal C thought that imposing team teaching or any of her other goals on teachers would not work. Instead, she would have to use persuasion. As she put it, "I've got my ideas that I have to sell them on, to bring some kind of cohesiveness to the school."

One method of persuasion was to show her approval of teachers whose actions advanced her overall goals. For instance, she was "thrilled" when two teachers had decided on their own to team. She told them, "You have my blessing -- go to it." She hoped that teachers would look to each other, as expert resources, for new ideas which would eventually advance her own goals. Teaming, for instance, would begin to bring structure to

Principal Perceptions of District Influence: Principal C was on the reading textbook adoption committee for the district, and through that group kept in touch with district directions in reading (see Reading section for more). She thought the committee would recommend just one basal series for all schools, for the sake of "continuity," and seemed to have no objections to this.

The district K-3 department was "very involved" with the primary teachers at the school, but the Principal C had a choice of which inservice offerings to select from them. She thought that the K-3 personnel clearly had a "whole language" philosophy, but that they were able to accommodate other ideas about reading at the school level. She mentioned the district reading coordinator, but said she was not someone they would "tap into" for help with reading at the school.

While the K-3 teachers received a great deal of inservice training, the district provided little for the intermediate grades, due to a lack of money for substitutes. A consensus agreement with the teachers said that the principal could not take up their planning time (25 minutes/day) for staff development, unless the teachers volunteered.

Asked about district-required Iowa achievement tests, Principal C said that she would find them useful for grouping children and pinpointing individual learning problems. She planned to ask the testing department to provide test results in a format that would "red flag" areas for the school as a whole to work on, and then a format for each individual child. She did not think that the teachers saw the Iowa tests as the only means of assessment, and in fact some teachers had already told her that they will "consider the test scores but it's not where they feel the pressure."

IV. TEACHERS AND TEACHING AT SCHOOL C

Observations of Teachers: The classroom observer found the teachers to be "relaxed, friendly, efficient and cooperative" when she first visited, just before the holiday vacation. She described the group of participating teachers as "one very strong teacher, but I don't know if he gets any support from the other teachers; two who collaborate (the team teachers); one older teacher who has been around other schools but doesn't seem to have much influence here; and one who is very quiet and just seems to sit back." The two male teachers struck her as being more self-assured, creative and competent in classroom management than the females. But one of these, whom the observer considered to be the "strongest" teacher of the group, did not appear to exercise any leadership in the group. On the whole, the observer thought that these teachers had fewer "preconceived ideas" about their teaching than the group at School A. Most, she thought, would be willing to consider new information and changes in their practices.

The observer's overall impression was that there was good "rapport" among the teachers, but not a high level of teacher interaction -- but then there had been little time to build

relationships. As for collaboration, two teachers traded reading groups. One took the "regular" group and the other taught the "IEP" students, those who were "behind" (as the teacher put it). During the observation period, two teachers (one male, one female) teamed up, combining their classrooms and splitting their areas of responsibility. They planned to set up a system of instructional centers. Each would continue to keep track of his/her own students' grades and progress.

Each classroom had the same general schedule posted, but the teachers seemed to be flexible about observing it to the letter. The classes operated with few inter options; the only ones observed were student pull-outs for band, the gifted program, and special education.

Principal Descriptions of Teachers: Principal C had only positive things to say about her teachers. She said, "I have a wonderful staff. They've got a lot of different talents, that together I think we're going to come up with a real good curriculum." From her viewpoint, the teachers seemed to be a "real cohesive group" made up of people with different areas of "expertise" and teaching styles. She said when other administrators asked her about her staff, she answered, "They just blend. And I can see that they're building trust with each other. And that's the direction I want for them." Despite their differences, she thought they would be able to "work together in terms of a focus" for the school as a whole. As she put it, teachers in this group were not the kind "that will try to say my opinion is the only opinion."

Principal C especially praised the team teachers for using hands-on materials and individualized instruction. When the interviewer asked her about the school health crisis in a telephone conversation, Principal C said that if any staff could handle it, this one could. She gave them high marks for their handling of the whole situation.

(Note: Most principal remarks re: teachers and teaching specifically applied to reading; see below)

V. READING AT SCHOOL C

Observations of Reading: The classroom observer did not notice anything special in the way of promotion of reading at School C. In fact, in a conversation with the observer, the librarian volunteered the opinion that she was disappointed in the low level of encouragement for reading, compared with other schools. The librarian's perception was that they did not have SSR and teachers did not often read to the children. She thought that the school did not have SSR because the teachers had not been able to come to an agreement about it.

Most teachers stuck with the basal reader and skills lessons during the observations. The observer noted that the reading comprehension lessons she observed did not match the descriptions the teachers had given in their pre-observation interviews. There was less variety and depth in the observed lessons than she

had been led to expect from the interviews. Three of the five teachers used almost exactly the same format. One teacher had set up a regular routine of SSR, book sharing, direct teaching, and an activity, which he paced according to a preset amount of time allocated to each task. On one observation, the observer saw half of this routine; and on another observation she saw the other half. Related to the librarian's complaints, the classroom observer did find SSR in the team classroom, but it did not seem to be a schoolwide policy. This classroom also had journal writing as part of a regular, daily routine. And two teachers did use a text other than the basal for their observed reading lessons.

The "stronger" teacher in the group, whom the observer called the "rebel," was more creative in his lessons and used more inferential questioning techniques. She noted, "He really exceeded anything that any of the other teachers had done in comprehension." But aside from this exception, the reading program did not appear to her to be particularly strong at this point.

The classroom observer related one incident in which a child was sent to the library for a book on Jacques Cousteau, and was sent back empty handed. The teacher said that because the library was new, its book collection was not extensive. The librarian had received one initial grant for books, an additional grant for paperbacks, and had raised some money from a book fair. But the shelves were still fairly bare. She had done what she could to arrange and decorate the library attractively, but few students could be observed there. Special activities planned for the upcoming Love of Reading Week were designed to promote more library appreciation and use.

The Principal and Reading: Principal C said that as a teacher she had used the same reading series her teachers were using, and therefore knew the "types of questions to ask teachers and also what they're not doing that they're supposed to be doing with the series." She had volunteered for the district basal adoption committee, so that she could learn in advance about the upcoming new series, and be able to supervise its use by teachers. She said that she favored a combination of the basal reader with other reading resources and strategies. The committee was also considering the option, following trends in California, of adopting a literature-based reading program. Principal C said that she did not know very much about that type of program, and was trying to learn more.

Principal C's positions on reading were complex, and expressed mostly in terms of her objectives for the reading program at the school (Therefore, Principal Objectives for Reading have been included in this section). One of her positions was that reading should be "integrated" with science, social studies, and math through a "theme approach." She wanted to see a move away from sole reliance on the textbook, paper-and-pencil tasks, and the old pattern of "read and regurgitate," since "that gets old for the students and I don't think they need it as much." She said, "There's so much you could do with these

intermediate children in terms of expanding some of the expertise they've built in reading." But she also added, "if they need remediation, you can do that."

That is, Principal C proposed expanding reading beyond "skills," but at the same time continuing to track and remediate those skills. Teachers, she thought, needed to learn more about both enrichment strategies and remediation, how to "to teach to those gaps children have." Specifically, Principal C was dissatisfied with the phonics program in the present basal series, and hoped to develop a schoolwide program of assessment and remediation of children's skills in this area.

The principal said she "would love to have the intermediates use a centers approach" as well as more creative writing, individual reading, and use of the library and books from home. She hoped to increase library use through special programs based on genres of literature, such as mysteries, adventures, etc. She would place these activities in the context of a "structured, individualized reading program." She wanted to see a "variety of reading structures" in each classroom which still included teachers meeting with reading groups for both in-depth enrichment and remediation. But she wanted a "type of reading group that is not the same every semester...the remediation reading group where we've got a clump of ten who don't know how to do syllabication or who don't have short vowel sounds, whatever. And we're going to pull you for two weeks and we're going to work on this skill and after that the group dissolves."

Principal C thought that the Iowa test scores might help to pinpoint areas of focus for remedial reading groups. But school staff would most likely also develop a local means of reading assessment, "a combination of a lot of things...something that is quick, so it won't be so time consuming."

Principal Descriptions of Reading Instruction: Principal C said that the intermediate teachers were doing the best they could in reading, but there were some "other methods and means that they are just not aware of." Most of the teachers, from her description, "structure the reading block...with read the story, do the workbook pages, and meet with the group...a teacher-directed lesson." She praised one teacher for trying reading contracts, and said that she saw some other "innovative things" happening, such as using the library for research and integrating social studies with reading. Nevertheless, she said, "The reading program in the intermediate grades is very painful for me because...it's the sameness. There is so much that you could do."

In a nutshell, she described the variety of the intermediate teachers' organization of reading instruction: "One intermediate teacher has three defined groups. Another teacher, everyone is in the same group regardless of level of reading...and handles the lower readers through an individualized reading program, letting them breeze in other things. He's lacking in remediation skills....One teacher is using the reading series, but it's more independent ...if you get stuck, come to me for help...she's also using the enrichment series and reading contracts...The team

teaching group has a combination. One teacher has all the children who are in one reader, a large group. And that's where I have some concerns because they're at all different levels in that one reader." Her concerns for individualization and remediation come through in this description.

In her evaluation of reading instruction, Principal C said she looked for grouping strategies, and tended to question keeping a large group in the same reader. She said that some teachers justified teaching children from a basal above their grade level on the basis of improving student "self-esteem." She asserted, "That's when I really feel I need to help this teacher." She also assessed how the reading block (time period) was allocated, and checked to see if the teacher was doing anything to expand on the standard format.

It should be remembered that only two of the teachers described above returned for Year 2. Early in Year 2, Principal C described reading instruction somewhat differently. The intermediate teachers had reportedly "departmentalized" for reading. They were using a system of grouping children and switching them among the teachers, so that each teacher had only two groups. Principal C had been "observing" this system, she said. She liked the "teaming" part of it, but she still saw the teachers as "missing" some things they could be doing with students. They were still using the basal reader questions rather than small group or individualized activities. She wanted to say, "Don't do that!!" Asked about how the teachers handled the stigma of being in the "low group," or being a fifth grade student sent to a fourth grade group, Principal C said that the teachers were mixing groups so that this would not be so obvious to the children. She described the teachers as still "grasping" toward a better system of teaching reading.

VI. RESEARCH AND STAFF DEVELOPMENT THEMES

Principal C said that "from talking with a few of the staff members, they are very interested in the reading research. I don't think it frightens them to say, 'Let's apply it' " The staff developers' style of presentation of the research would matter most. Teachers think, "Don't tell me the research. Show me what you're talking about when you say, 'We've discovered this,' or 'We've analyzed it and we think if you do this, you'll get certain results.' " Teachers would instead want to see demonstrations of the applications of research, "to mesh the research with some actual experience."

One hope Principal C had for the staff development was for her to find out what the teachers thought they needed in the area of reading. In her experience, they had a hard time being specific about their needs. She, on the other hand, was very specific: "You know, I want remediation reading skills for my intermediate teachers." Another focus that she would choose would be how to develop a comprehensive reading program that did not seem "overwhelming" to teachers. The intermediate teachers could become more "comfortable" with the enrichment and thematic

approaches used in the primary grades, and see how these approaches would be possible for them to adopt.

Principal C talked at length about how she would conduct the staff development, if she were doing it herself. She would "approach them with a vision of how I think a reading program in intermediate should look like. And then ask them if they share that vision, or if they want to add to it, or think it's a bunch of hot wind, not even attainable." She would ask them to assess their own strengths and weaknesses, and decide what they would like to change. She would also expose them to some key terms, such as "individualized reading," or "thematic approach," and ask what frightens them about the prospect of moving beyond the basal reader. She would describe the entire structure of a reading program, including the organization of time and groups, and walk teachers through it. Her staff development philosophy was, "You don't just give teachers a philosophy. You have to roll up your sleeves and say, 'Here's how you do it.'"

The classroom observer's impression was that it would be important to involve Principal C in the staff development, because of her influence on the teachers (which she felt even though it wasn't too visible). She also thought that involving the principal might be somewhat difficult, because of her aloof manner. But with the teachers, she saw no problems. They seemed to be open-minded and willing to consider change.

CASE STUDY: SCHOOL D

I. GENERAL SCHOOL DESCRIPTION

School D was located in a predominantly middle class, suburban neighborhood of single-family homes interspersed with condominiums, apartments, and well-tended mobile home parks. The original school, a cluster of small buildings, had been recently expanded with a two-story classroom addition. The principal explained that due to rapid neighborhood growth the school had one of the largest student populations on the smallest school acreage in the district. The 23-year-old building was originally planned to house 450, had housed 570 at the end of 1985-86, and for 1987-88 (Year 1 of our study) had to accommodate over 750. Average class size was somewhat high at 27. For Year 1, the new building and several new teachers had alleviated some overcrowding. In Year 2, parents of sixth graders would have the option of sending their children to a new middle school, and this would reduce enrollment.

The School D teaching staff was the largest in our study, 26 classroom teachers and two LD teachers. Most of the teachers were veterans of 10 or more years' experience, and many of the intermediate teachers had long been employed at School D. School D offered ESL services to a few LEP students, and gifted and LD programs, but in general, special programs were not much in evidence. Principal D had requested the district to provide more hours from the psychologist and additional remedial services, in the form of a "lower quartile" teacher for Year 2. Teacher aides were also in short supply; for example, the fifth and sixth grades had only one teacher aide among them.

Discipline did not appear to be a major concern at this school. Principal D described the students in the school newsletter as "consistently hard-working, courteous and caring." Students who needed to make up work or who had misbehaved were listed on the chalkboard as "Break Buddies," and required to stay inside during recess. The observer did notice that veteran and new teachers had different methods of classroom management, the veterans relying more on threats while the newer teachers used the more current system of explaining rules and consequences to students. Some teachers more than others seemed to rely on the principal's support for student discipline. There were a few problems associated with students moving around the campus on their own between classes (e.g., restroom vandalism). Custodians and teacher aides were assigned to supervise these periods.

The principal described the intermediate teachers as under "stress" and "overloaded." The principal himself was difficult to contact and seemed harried when we did talk with him. Nevertheless, all observers remarked about the friendly atmosphere at School D. Despite the size of the student population, office staff often referred to students by name, and seemed to enjoy working with them. Next to the office was a new teachers' lounge built at the same time as the new classroom addition. The observer described the lounge as the nicest she had ever seen, with space for meetings, socializing, reading

education publications, and sharing instructional ideas. In general, the observer found School D to be a positive, pleasant place. She was welcomed to the school by both staff and students, and noted: "I get the impression that everyone enjoys being here," and "I really liked it and I think the teachers who work there love working there. There is a lot of school pride."

Student Population: Students at School D were 97% Anglo, 1% Hispanic, and 2% Black and other ethnic groups -- it was the most ethnically homogeneous school in our study. Only 15% qualified for the free/reduced lunch program, a rough indicator of low income. However, the principal said this represented a tripling in the lunch program over the past three years, as the population shifted from being overwhelmingly middle class to including more low income families. As he described it, the "core" of neighborhood students was stable, but surrounding the core was a constantly shifting layer of transient students. He said it was "disruptive" when students would enter and stay for just a short time. "Those youngsters don't have a stability, and the big thing that we've noticed is that skill levels tend to be lacking...Our people have high expectations, and when students come in who have not been in systems that have those expectations, either because of the movement or because of the kids' ability, they have a difficult time adjusting." Principal D said teachers were complaining that transient students were detracting from the school's traditionally high achievement record, specifically that a decline in Iowa test scores the previous year was due to a group of students entering at test-taking time.

(Note: All of the other schools in our study were located in another, much larger urban district. On the average, School D's district scored ten percentile points higher in reading on the Iowa test than this other district. Though School D was the highest-achieving school in our study, it placed in the middle of its own district's range, and any further decline seemed to be a concern.)

In their interviews, five of the participating teachers at School D talked about students and their families. Three clearly linked school achievement to a student's family background, and emphasized the differences between good and poor students in these terms. One went on at great length about how this relationship between home and achievement came about. The other two simply remarked that the school population had changed from being mostly middle class to being a "mix" including more transient and low income children. They thought that most of their students were doing well, but one was very concerned about how non-English speaking students were coping at the school.

School History: School D's first principal had implemented an "open education" model; but over the years, and especially under Principal D's leadership, this structure had been somewhat modified. The primary grade students now had a fairly traditional schedule of homeroom activities for the morning, followed by ability grouping and rotating among classrooms for reading in the

afternoon. The fourth grade students were also ability grouped and rotated for reading. But the fifth and sixth grades were departmentalized and moved from class to class in what the principal called a "junior highish" pattern of 50-minute periods. Students carried assignment books with them, and the last few minutes of each class period were taken up with writing down assignments for each subject.

When Principal D first came to the school, fifth and sixth grade teachers were seeing as many as 200 students per day. He had modified the schedule for Year 1 so that they taught only 60-75 students each day. These teachers were content area specialists. None of them taught "reading" per se; some taught "language arts" or "English" and others taught reading only in the context of their content area.

The teachers commented about these arrangements in their interviews, about how the team structure affected their work. The advantages mentioned were the camaraderie of team teachers and the improved social skills of students (learning to take more responsibility and to cope with different teachers' demands and personalities). The disadvantages mentioned were the difficulties of teaming, the number of meetings it required, and the limited content of the meetings (mostly talk about individual students). Three teachers also remarked on how stable the staff had been, and how new teachers this year had changed the school ("new blood" was good, but it also disrupted a consensus that previously existed).

II. INITIAL CONTACTS WITH THE SCHOOL AND RESPONSES TO THE PROJECT

School D was recommended to our project by district officials, who decided which schools could participate. One of the researchers heard that there was some discussion among district administrators about which "kind" of schools to recommend -- Chapter I schools or "middle class" schools. In the end, two "middle class" schools were chosen. However, the final decision on participation was made at the school level, by the teachers. At one school the teachers declined to participate, despite the enthusiasm of their administrators. At School D, VR contacted the principal, who sounded "under siege" and uninformed about the study, but agreed to have someone "come out and talk about it."

PA and the school level assistant met with Principal D to explain the study. At this meeting, it appeared that he had heard very little about the project from the district research specialist. After listening quietly and taking detailed notes for a while, he began to seem interested and started to formulate his own way of presenting the study to the teachers. He said he would say that the study would examine teachers' practices and attempt to "improve" them. But then he chuckled and said that he was a "politician" and would use the word "enhance" instead.

Principal D also chuckled when informed that the study would involve only the intermediate teachers, saying "That could have been better." There was, he explained, a split between the fourth and fifth/sixth grade teachers on the topic of reading.

But perhaps the project would be a "good chance to talk about" these differences and to "reach consensus." We predicted that some would decline to participate in a reading study, because they would not see the connection with their content areas. For his own purposes, he thought he could tie the staff development aspect of the project to a curriculum mapping project he was working on. He said that the big question would be "What do we get out of it?" and he carefully noted and repeated what the optional rewards for teacher participation would be. Finally, he agreed to "bounce it off" the teachers and get back to us about meeting with them.

When we did not hear from Principal D, VR called him. He said that he wanted to participate, and that the teachers had agreed because there was "not much they will have to do" for the study. VR asked what our next steps would be, and he hesitated, going back and forth between setting up a meeting with the teachers and having the observer contact them individually. Finally, he decided to schedule an after-school meeting with the teachers.

When we arrived for the meeting, Principal D seemed rather flustered. There was a PA announcement reminding intermediate teachers of a "short meeting." Principal D said for us to wait in the office until he did some "preparation" with the teachers. After about fifteen minutes, he came back to the office and accompanied us to the meeting. On the way, he said that the teachers would have a lot of "specifics" to ask about, and that time would be the "biggest pain" for them.

Principal D introduced us and said that the teachers could ask questions about the project until they got their "comfort level where I like it." Then he sat down and turned the meeting over. The teachers did have many questions, and seemed not at all reticent about asking them. The principal sat silently and rather glumly at the side. The first question was about the testing aspect of the study. The district required both the Iowa and a state criterion-referenced test each year, and both required a week to administer -- not including "preparation" time. How much time would our test require? PA described the Illinois test and its administration, and remarked that we would be "very disappointed" if the teachers "prepared" for it. The teacher immediately replied to this that they prepared for the Iowa test all year long, and it "certainly wasn't cramming." Other teachers asked about "off-level" students, student turnover during the project, if only teachers who taught "reading" would participate, what the content of the staff development would be (the "literature" on reading comprehension?). During all of this questioning, there were interchanges among the teachers, who seemed quite comfortable about making both joking and serious comments to each other. For example, when one teacher asked if we wanted to know if they were "using the research," another teacher turned to her and said emphatically, "You're using it. It's what we've been talking about. You just didn't know that's what it is."

Finally, one teacher waved her project abstract in the air and called out, "I'm game!" Others nodded in agreement. Then the

same teacher dramatically batted her eyelids and said, "Okay." The group laughed. When the laughter died, she said that there was a statement in the project abstract that had "raised their hackles," about evaluation of reading instruction. She faced us directly and said, "What's wrong with our teaching?" "R said, "Nothing." The teacher replied, "You understand how that makes us feel. We have good ideas. Why are yours better?" PA firmly recognized this concern as "important." The teacher said that she was doing this for the principal, because he had told her to be "more aggressive." Another teacher joked, "You mean you were a shrinking violet before?" Principal D looked slightly embarrassed and said that he had told her that in a "weak moment." PA explained that the sentence was the kind one wrote to attract federal funding for research. She made a pitch for "getting inside teachers' heads" and not imposing university research on them. Another teacher followed with a question about the "recommendations" of the study. Referring to the teachers' reading instruction, he asked, "If it isn't broken, why fix it?" VR replied that the study would "describe" rather than "prescribe" what teachers were doing in reading comprehension instruction.

There were a few further questions, about what the study would report and whether we were aware of what the district was doing in this area, but by this time the major sticky concerns seemed to be addressed. Finally, someone wanted to know, "When will we start seeing you?" Principal D stood up and asked, "Who teaches reading comprehension?" Despite his earlier prediction, only the art teacher clearly declined. AB said that she could come to classrooms to schedule appointments for observations the next day. But the teachers said that would be too hard, that she should just sit in the teachers lounge and they would drop in and sign up. When AB went the next day, she said that the teachers all followed through on this arrangement. The principal brought her coffee and cookies. The teachers were so enthused she stayed and completed some observations that same day. She noted, "Everyone at this school is friendly."

At a later interview, Principal D said that he viewed the project as part of his own agenda of preventing further "dips" in achievement at the school by influencing the teachers to pay more attention to reading skills. He would like the principal investigators to sit down with him and examine the Iowa test scores at the school, to "come up with a strategy that would address those." As he put it, "one of the reasons I've pushed this project is not only to help us, but also to help me. To give us some resources we could use to take a look at our reading instruction and have a side group look at it and come up with some recommendations...What I'm basically looking for them is for somebody to come in and say, 'Hey, I think you do some things really well...Here are some areas that we think perhaps you could jazz up a bit.' So it's an outside person doing it...Sometimes they need to hear things they don't feel real comfortable with." He predicted that the observations would show what he held to be true: that instruction at the school was basically sound, but that there were "gaps and holes" in instruction of children with

low "individual skill levels."

It was interesting that shortly after our meeting with teachers, the district research specialist who had approved the project called VR, rather put out. She said that the district had been "misled" about the extent of student testing involved in the study. Apparently, she had not received a copy of the full proposal from the superintendent. VR's explanation seemed to placate her, and she was sent a copy of the proposal. We wondered if someone at School D had contacted her. In contrast with the other district in our study, administrative staff in this district seemed to be more concerned about monitoring research and more protective about its potential impact on teachers.

III. PRINCIPAL D

Principal D was a fortyish man who was just into his second full year at the school when our study began. In our contacts with him, he generally appeared to be rushed for time and rather tense. His office was small and cluttered, with papers and other objects piled on every surface, including the floor. The classroom observer described him as "very visible." She wrote, "He wanders in and out of classrooms, without disrupting classes. Kids and teachers seem used to this." Sometimes he had information to share with the class, such as his reports of a "climate survey" on what students thought about the school. He also gave students' special recognition for accomplishments on these visits. But once he complained to a class about having to discipline certain students so often, saying they were on his "hit list," and he was tired of seeing them so often.

The classroom observer noted that the teachers did not seem at all in awe of Principal D. She observed that they felt free to make joking comments to him, to interrupt him in midsentence, and to challenge his judgment. He seemed to defer to teachers in these situations. From what she could tell, the principal was not included in the active "communication network" she observed among the teachers.

Principal Background: Principal D repeatedly mentioned that he had a "special education background," and that this was important for understanding his views toward teaching. He was a special education teacher for a number of years, in a "variety of exceptionalities." In the late 70's he had been a Director of Special Education and later Migrant Director in California school system. Then he was named Curriculum Director for a Phoenix-area district. After one year as principal of a school in another local district, he was promoted to Director of Pupil Personnel. He described this position as "all encompassing, special education, attendance, nurses...We started an alternative program, we started AIDS instruction, we did a variety of things." He said the decision to return to the principalship was based on a desire to "get back into a school, working with teachers and students."

Principal on the Principalship: Principal D said that he understood that having to deal with a new principal had been a source of stress for the teachers over the past couple of years - he described it as a "real thrill" for them. He had decided to take a "global" and "structural" approach to the school. First he had looked at overall problems in the grouping and movement of students, and had made some changes in this area. Next he had tackled curriculum coordination and articulation. A large, longterm curriculum project was moving more slowly than he would have liked, but he explained that he had been unwilling to require more time of the teachers to accomplish this goal.

Principal D said that sometimes his "global" approaches to leadership had their weaknesses. For instance, he said that it was frustrating that he could "talk in generalities" about aspects of teaching, but he could not give teachers the "specific types of skills they need, if they do need them." He also had some difficulty communicating negative feedback to teachers. He thought that the project, conducted by "outsiders," would support him in both of these areas, by providing specific and critical feedback to the teachers about their instruction. "I don't believe in a complete democracy," he explained, "Sometimes teachers have to hear things they don't want to hear."

In his opinion, some of the teachers at School D had a negative set toward administrators. He remarked that the veteran teachers were used to a high rate of principal turnover, and tended to make their own decisions regardless of changes in leadership. However, he described himself as "not easy to ignore, for better or for worse." "The hardest thing I've had to fight with them," he said "is that I'm an involved administrator, I'm out there all the time, in the classroom, I'm on the playground, I'm involved in instruction." From his point of view, some teachers reacted negatively to this style of leadership. But he noticed that the recent addition of several new teachers had changed the staff dynamics at the school in his favor, since the new teachers were more receptive to his ideas for change.

Principal's School Goals: "The biggest thing I think is that we've got a number of problems we have to deal with," said Principal D. The primary problems he named were school growth and transient students, but he also saw the teachers themselves as a problem. He described the veteran teachers at School D as constituting a barrier to change, because they had "stagnated" in their jobs and become inwardly focused. Therefore, "The first thing to get going was to get people to do some communicating among themselves and to also start examining new ideas and examining different approaches to doing some things...that can be a challenge." At this point, he remarked, "I feel good about the feeling we have on the staff. But it still has a way to go."

Principal D expressed more clearcut satisfaction with his accomplishments in changing the physical and structural features of the school. Overcrowding and large teacher classloads in grade 5-6 had been a source of stress for both staff and students. Principal D said that it had been a "real accomplishment" that they had been able to "plan, design and get the new building

built in one year. It really made a difference." He had had a "real problem" with the amount of student movement he observed at the school when he first arrived, especially in the primary grades. He said he had discussed this with the staff, and "to our credit, after some discussion we were able to get to a situation that we could both live with." "Now if you look around this campus, kids are in class and kids are receiving instruction." He wanted the structure to stay just about the way it was now, except that fourth grade still needed some work. "Fourth is the area that we want to hit, because you have the K-3 that is working and the 5-6 that is working, and we need to hit 4, which is that transition, and get that functioning okay." He agreed with the fourth grade teachers that the departmentalized plan was not best for their students, but was not sure that the structure they had devised on their own was working, either.

"Now the direction we need to head into is to hit specific skill areas and specific curricular areas," Principal D said. Through inservice workshops, they had done some work in "holistic" language arts and some in math, with a program promoting manipulative activities. The district had been emphasizing cooperative teaching and higher order thinking skills. But Principal D saw these efforts as "piecemeal" and expressed a need for a more deliberate effort to address the skill deficits of certain students. He wanted the teachers to get into the "mode" of coping with a transient student population with "varied skill levels." He was addressing some inservice time to this issue, and hoped that this would be a major focus of the reading project. The teachers also were asking for more remedial help for "those kids who fall in the gray area," and that would be an emphasis for the coming year.

Most efforts were going into the curriculum project. He had started out his first year thinking the staff were going to write their own curriculum. But he had to admit, "No, you dork, you can't do that much all at once." They were working on curriculum mapping first, trying to get an accurate description of what was presently being covered at each level. In addition, he said, "I'm trying to get a little bit more adherence to the district curriculum, and then some type of overlap between the various grade levels. That's one area I think is real weak...We need a. less overlap and b. more moving from step to step all the way through. Right now the steps are real haphazard, not real bad, just because of noncommunicating." Given limits on available time for doing this kind of intensive group work, Principal D thought the curriculum project would last at least two or three years. He hesitated to ask teachers for after school time, and was hoping for district approval to meet with some of them over the summer to tackle the next steps of curriculum articulation across grade levels.

Principal Remarks on Teachers and Teaching: As for his own positions on teaching, Principal D referred again to his special education background, saying that it tended to make him "real eclectic regarding teaching." He explained that while he supported the district's promotion of higher order thinking

skills, he was not really "proactive" himself in pushing any particular new trends or methods of instruction. "I think there is a danger in that...not one method is going to work with every youngster or even 80% or even 50% of the kids. You pull what you need to pull and do what you need to do to hit as many kids as you can. I don't know. Some people get a dogma or a philosophy and they're successful with it, I'm not putting them down...they can be real successful because they accumulate a group of people that believe philosophically like that."

Principal D wanted teachers to focus on developing skills among students who came to the school without certain prerequisites for achievement. His own preference, as a former special education teacher, would be to do an individual diagnosis for each child and then address deficits in "skill levels," "throwing in" some holistic activities on the way. But he did not think that these teachers had the time or the "inclination" to adopt such an approach. He had also heard some argument from the teachers at School D that a "skills" emphasis meant lowering expectations for students. But from special education he had learned that "your expectations can be high, there is no reason that you dilute your expectations, but you need to give a youngster the skill to allow him to get to those expectations."

He had training and experience with EEI, but Principal D recognized that mentioning this in some circles would bring on an argument. He said that he had found it "valuable," especially as a basis of evaluation: "I'll look for those types of things. I think most solid teachers, whether you call it that or not, do those things. They establish a set, they cue the kids, they move on with the objectives, they reinforce it and they evaluate whether they've gotten it." He continued, "As a special educator, I really feel I have an advantage, because most of the things that they're using now are some things that we've been trying in special education for a number of years. EEI was called something different by Hunter, but basically the special educators have taught to the objectives since I was taking graduate courses in the early 70's."

Principal Influence over Instruction and Teacher Change:
Principal D said that he was an "involved" administrator, and that one of the things he was involved in was instruction. However, he did not talk about changes he had attempted to make in individual teachers' instruction. As noted above, he said that he did not feel competent to mentor teachers on the "specifics" of their work. He had also met with teacher resistance to his attempts to be involved in the classroom. In his opinion, and he said he had told them this, they wanted an administrator to do their "crap jobs," supervising recesses and handing irate parents. But Principal D also said at another point that he thought the School D teachers were really quite competent in their preferred approaches to instruction. Instead of changing these approaches in any major ways, he was interested in augmenting what was already being done with more attention to skills for certain students, more remedial services, and more coordination in coverage of the curriculum across teachers.

Principal D evaluated teachers using the standard district criteria, checking on "competencies" in the areas of instruction and professional duties and responsibilities. Since the teachers had some training in EEI, he looked for "those types of things." They had a basic curriculum from the district that they were "supposed" to follow, but beyond this, teachers were "pretty much left on their own" to make most decisions about instruction, and he did not want to "dictate a certain style of teaching or a certain way to teach." If he observed problems with a teacher's instruction, he said he was "just upfront and direct with them about it. Not to overwhelm them with it. I usually prioritize an area that I think needs to be discussed and hit that particular area....I probably need to do a better job with that and get more specific with my recommendations. I tend to be more general...and I think a more specific approach they would react to better."

What seemed to concern Principal D much more than the teachers' work in the classroom were their interpersonal dynamics and especially their relationships with him as an administrator. He described the teachers as "real argumentative" when he arrived, narrowminded and resistant toward any changes he suggested. He attributed this to the fact that so many teachers have been at the school so long. He reported that a previous principal had even brought in an outside consultant to help the teachers "communicate better," but they had not responded well to this approach. He had worked on "not tolerating" the teachers' argumentativeness and on "broadening their horizons a little bit." As one strategy, he devoted part of each staff meeting to recognizing good things teachers were doing, in order to encourage teachers to observe in other classrooms. From his point of view, the newer teachers had helped him by responding positively to ideas that the oldtimers were quick to reject.

According to Principal D, when he came teachers were also holding old grudges and opinions based on old and inaccurate information. He talked at length about how he had used teacher participation, in the form of small group discussions and "brainstorming" strategies, to bring new information to light. The small group arrangement, he thought, allowed everyone to participate, rather than just a few vocal teachers who were often negative and intimidated their peers into silence. The results of a "school climate survey" he conducted had been one basis of these discussions. When faced with new information, he said, the teachers were "professional enough to say, 'Gosh, we were wrong on that.'" All in all, "they are a good group of people. You just have to get them...willing to think a little bit."

The only weakness of this small group approach was that it was time consuming. "When you're dealing with 35 people at a throw all the time, it gets bogged down. And I have not felt that we've made some decisions that we needed to make. I feel that I get some flack on that, and yet my defense is the fact that when you do group decisionmaking, it's going to take a while." His preference would be to meet with a group of grade level department heads, to whom he could "get information and then they come back to me with recommendations [from their

colleagues] and then as a group we make some recommendations to the whole faculty. Hopefully, we can yell and scream and rant and rave and get that out of the system here. That way we can present a unified approach to the faculty. They've all had a part in the decisionmaking."

Principal Perceptions of District Influence: The district provided a basic curriculum for each grade level, but through the years, Principal D said, teachers at School D had not been held accountable to this. Since a decentralization, the district did not have a curriculum coordinator, and schools were doing their own curriculum development. "The danger in allowing teachers to do something like that," he remarked, "is that they develop their own curriculum, but it may or may not reflect the district's ...that's my problem now." He said that he would have to decide "is that a battle I want to fight? Is the curriculum so poor in reality or is the instruction so poor that the kids aren't getting quality instruction? I don't think that has happened."

The district did influence the school by providing inservices in certain areas they were "pushing," such as higher order thinking, cooperative teaching, improving reading skills and promoting reading through special programs such as Love of Reading month. The district seemed to take the tack, Principal D said, of exposing teachers to ideas and then hoping they would catch on.

Principal D reported that the teachers were "not happy with the services provided for special education students" by the district. He said that there was a pattern in the district of providing the same level of services to schools regardless of size. He had protested this policy, but "all the other principals are on my case like I'm some kind of autocrat who believes you just ought to go with the numbers."

As previously mentioned, this district required both Iowa tests and the state-sponsored criterion referenced tests each year. There was some concern on the part of Principal D about the school's achievement test scores, but he did not explicitly attribute this concern to district pressure. He observed drops in scores from third to fourth and fourth to fifth grades, and noted that these were the years when teachers began teaching reading in the content areas, rather than skills instruction. Though this seemed to raise a red flag for him, he was "not sure there was a real problem with our instruction." If he saw "dips" this year, he was going to take a closer look. For now, he was attributing the drop to "different clientele" and now-corrected problems with the school structure. Though he repeated that test scores were not a "real area of concern," he continued throughout the interview to frame our project in terms of examining reading achievement scores and devising strategies to improve them.

Teachers on the Principal: The participating teachers at School D mentioned the principal very little in their interviews. No conclusions could be drawn from the three very brief comments that referred to him, almost in passing.

IV. TEACHERS AND TEACHING AT SCHOOL D

Observations of Teachers: The observer had contacts only with the intermediate teachers at School D, since the primary classes were located in different buildings. After observing and interacting with these teachers, she concluded that the school was "a great place to teach." She would predict that a new teacher at this school would be welcomed and would find other teachers helpful. In fact, she observed this kind of interaction among some of the veteran and beginning teachers.

According to the observer, the level of interaction we observed at our meeting with the teachers was the norm at School D. As she described them, "The fourth through sixth grade people that we're looking at, I've never seen such a group of teachers that are so together in all my life. They socialize, they pop into each others' rooms like there's no tomorrow." This pattern of frequent interaction, which the observer even found disruptive of instruction at times, seemed to include all but two or three of the nine teachers in our sample. Certain teachers seemed to have particularly close relationships, e.g., the fourth grade teachers who shared a classroom and "talked about everything, instructional and otherwise," including making negative comments about certain students in front of the class. Two sixth grade teachers who taught the same subjects and had neighboring classrooms also seemed to communicate often.

However, from the observer's impressions, teachers did not meet regularly and deliberately to plan or coordinate their instruction. Their decisions about instruction seemed to be "pretty much up to them" individually. Teachers seemed to make positive or negative judgments about what others were doing, based on informal interactions and what they could gather from student reports. Some even questioned their students about other teachers' activities. As the students moved about the school, they acted, as the observer put it, as a "wheel of communication" among the teachers.

The teachers lounge was also important for teacher interaction, both social and instructional. Every Friday, the teachers brought food to the lounge for a weekly "pigout" day, and there was a weekly football pool. The lounge also had a magazine rack with education publications and a bulletin board for sharing teaching ideas. On the bulletin board were reports from a group of teachers who met about once a month after school to talk about reading. Group members seemed to include all of our participating teachers except the two fourth grade team teachers. Teachers seemed to rely on a teacher who was in the masters program in reading at the university for information and leadership in this area.

The observer saw the teachers at School D as "pretty well-informed, and they pretty much know what they're doing now and like what they're doing." They would probably vary in their receptivity to the staff development, since "they're all so individualistic. I think there is a core that would love some input [from our project] and would try to make some changes. But I also see two or three outliers who wouldn't change if you

threatened their lives."

Principal Descriptions of Teachers: Principal D described the intermediate teachers as an experienced group, "competent," "opinionated" and "proud," who felt that they had a "basis for their reasons for teaching the way they do...I think they feel real good about themselves." Several times he mentioned their "high expectations" for students as a key to understanding them as teachers. He said that they would be "straightforward and honest" in their responses to the staff development, and would likely be concerned about how much time the project would require of them. On his climate survey, most of them complained "that they didn't have enough time to teach." They tried to offer a well-rounded program, with language arts and math "up front" and science, health and other "auxiliary subjects" in the afternoon, and he thought they succeeded better at this than teachers in most "regular" school structures.

Most of the teachers were familiar with "holistic" education, but there were "philosophical" differences between the fourth and fifth/sixth grade teachers, especially in reading. Fourth grade teachers, like the primary teachers, tended to emphasize individualization and reading skills. Some fifth and sixth grade teachers seemed entrenched in their position that a whole-group, literature-based approach was best, even for students with reading difficulties. "They feel that when you have those expectations and you expect them to be reading at those levels...they can come and give you one success story after another about it. So it's a hard issue to combat." However, Principal D added, "One thing I will say about this particular group is, if you sell them on something, if you get past that initial block that sometimes they put up, they're fantastic. They'll use the information and they'll do a great job with it."

Teacher Comments on Teachers and Teaching at School D: Despite talk about the "team" structure at School D, the teachers remarked on how there was still a lack of coordination and communication across grade levels and limited knowledge of what others were doing. Two mentioned how the students were their source of information about other teachers' activities. These barriers seemed most likely to be overcome when teachers shared a classroom or had nearby classrooms, shared students and talked about individual student problems, or taught in the same subject area. Talk about individual students or specific instructional materials seemed to be more likely than talk about the overall curriculum. One teacher also mentioned how close the older staff had become over the years ("we almost know what the others are thinking"), and how they needed to take care to integrate the new teachers. Another teacher remarked that she felt uncomfortable with telling new teachers "here we do it this way," since they might have their own good ideas to contribute. Two of the veteran teachers talked about "mentoring" one of the new, beginning teachers through sharing ideas and materials, though they did not visit her classroom.

On the teacher questionnaires, teachers at School D

responded most negatively of all schools about the adequacy of the time they had to complete their duties. They also complained about a lack of coordination of instruction at School D, despite the fact that their school organization probably facilitated this more than any other.

V. READING AT SCHOOL D

Observations of Reading: The classroom observer had the impression that all of the teachers she observed considered reading to be important, but there was no outstanding promotion of reading at the school through reading contests or prizes. Classes had silent sustained reading every day. However, we had arranged to observe times when teachers considered themselves to be teaching "reading comprehension," and the observer saw no actual "reading" during these times. Most participating teachers followed a pattern of assigning a reading to be done at home or during SSR, and their lessons consisted of asking questions about the reading. "The lessons," the observer said, "go zippity, zippity, zip in that format." Three teachers did not follow this format. A beginning teacher and a teacher in the masters program in reading used more "interactive" approaches. One sixth grade teacher combined history and literature, and primarily used book reports and worksheets.

Fourth grade seemed to be the "last bastion of basal readers," the observer noted. Fifth and sixth grade teachers taught "English," sometimes using readings from the basal and sometimes other literature. Fourth grade students were ability-grouped, while fifth/sixth had heterogeneous groups. The observer said, "The comment that I've gotten from the upper grade people is, 'We need a mix, it helps. The lower kids learn and the more advanced kids get to help, and it's good to mix kids.'"

While the observer was visiting School D, the librarian was running a program in which students were given daily clues and they had to check certain books in the library to find the clues. The librarian also used the school newsletter to recognize parent and student contributions to the library, to report on new titles available, and to promote family use of the public library. However, the observer also heard from some students that the "crabby old librarian" was "making them look up things themselves, and won't help them." She had the sense that the teachers wanted to use the library, but the students were not enthusiastic about the librarian. In addition, each class's library time had been cut due to overcrowding.

The Principal and Reading: Although Principal D had taught reading as a special education teacher, he said, "I don't consider that an area of strength for me. That's something I need to jazz up...when it comes to reading, I've done it and I've done it well, but I haven't done it for a number of years...I could talk in generalities. I could talk 'whole language.' I feel real comfortable with that, because I taught whole language types of activities and I feel real strongly about doing that, and I did skills levels to a certain extent. But that was years

ago." When he first taught reading, Principal D said, the "basal texts were much less flexible than they are now. The reading was much more stilted." One thing that bothered him about the "old skills based approach, though it wasn't necessarily wrong," was the teaching of "skills in isolation." A teacher would give a battery of tests, look at "skill deficit areas" and then "hit individual skills to cover that. You really didn't have a holistic approach to it at all." Now the philosophy of reading was more holistic, and reading textbooks were improved both in their reading selections and their treatment of skills. "Language arts" programs integrated reading and writing.

When Principal D was director of a program for migrant children in California, he had run a literature-based reading program. He said, "I really enjoyed it. I saw some real pluses." The program was in a "real tough area.. igh mobility, 90% minority...If you had told me at the beginni. that you'd have migrant youngsters totally enthralled by Tom Sawyer, I would have said, 'You're crazy.'" But the program worked, because "good literature motivates kids, if they're in the hands of a good teacher." As far as he could tell, the research also supported this position, since "people who read good literature get better reading scores and they have better reading skills."

However, Principal D added "I still think we need to retreat occasionally and fill in some of those deficit areas." He argued for a "combination" or "marriage" of literature and skills approaches, especially for students who lacked certain reading skills. "Our people tend to be more holistic, and I'm not against that. But there's a point where you have to examine specifically what skill areas the youngster is lacking. Try to give them a dose of what they need to get that skill level up, and then bandage it holistically...If you keep expecting a kid to read literature and he doesn't have those particular skills, that's not going to do much good."

Principal Descriptions of Reading Instruction: The philosophical and instructional differences between the fourth and fifth/sixth grade teachers have already been mentioned. Principal D seemed to see strengths in both. He agreed with the skills emphasis of the fourth grade teachers, but also praised the fifth and sixth grade teachers' emphasis on literature, saying "Our youngsters read an incredible amount." He had applied for recognition from the state department of education as an "A+ School." The research he consulted said that students in most schools averaged 4-6 minutes of independent reading each day. At School D, students averaged 20-35 minutes, "conservatively, not counting what goes on at home."

He saw all fourth-sixth grade teachers as using a variety of materials to supplement their reading lessons. But fourth grade teachers used primarily the basal reader, with the addition of these materials, while the fifth/sixth used the basal very little. They did "real well at getting kids into the library and getting their hands on literature and providing them with opportunities to read that literature." He had heard some teacher complaints about the basal reading series (Houghton-

Mifflin), but thought that these were due to a typical pattern of teachers being enthused at first about a series and later becoming tired of it.

Principal D thought that the librarian was doing a "good job as far as reading to youngsters, encouraging literature, encouraging involvement in reading activities." He said that the school had a high rate of library use, and since they had installed the only computerized checkout system in the district, this was easy for the librarian to manage. The school had a program called Reading is a Family Affair, to promote taking books home for parents and children to read to each other.

Principal Objectives for Reading: Principal D had "concerns" about the fifth and sixth grade reading program, especially their nonuse of the basal reader. "With the kids that historically we have had," he argued, "that has worked real well, because their skill levels are to a point that giving them supplementary types of reading is just going to improve their reading, increase their skills...but with the population that we're starting to get and with the transiency of this population, we're going to have some real big holes in those skill levels, in my opinion. So what you need to do then is, not necessarily go back to a basal approach, but certainly go back to a skills approach to a certain degree..." He said that the dilemma of how to cope with transient students with diverse skill levels might well be the focus of our staff development. "I think some assistance on how to use the basal for fifth and sixth grades, along with a real strong literature-based approach, would probably be a real effective inservice for them."

However, as mentioned earlier, Principal D thought that the fifth and sixth grade teachers would be firm in their defense of the literature-based approach. He seemed to want the staff developers, as "outsiders," to accomplish this objective.

Teachers on Reading at School D: Most teachers at School D commented that they really could not say that there was a "characteristic" way of teaching reading at the school. One reason given for this was lack of knowledge of what others were doing ("I haven't the foggiest notion," said one.) Four teachers, however, did claim knowledge of other teachers' approaches and said that they knew they were different. Only one talked about the specifics of these differences: a division between those who used the basal reader and those who did not. According to this teacher, the non-basal teachers had reportedly diverged from the others a few years before. But another teacher thought that the three brand new teachers were the ones who had introduced the diversity in reading instruction. One teacher who emphasized reading as "skills" said it was only "realistic," since children were required by the district and state to be tested on these skills and they should be taught directly.

As far as schoolwide reading activities, one teacher mentioned both the Young Authors program (her students had written books) and a Reading Week the school was planning for the first time.

VI. RESEARCH AND STAFF DEVELOPMENT THEMES

Asked about the relationship between teachers and research, Principal D did not express his own opinion at first. He recommended, "I think the route to go with this would be to get some key communicators among our faculty and discuss that with them, prior to the staff development. In other words, get the research and say, 'Here's what we're looking at doing with the faculty inservice. What's your reaction to that?'" In his opinion, teachers' response to research might be tied up with their attitudes toward "other people's roles." "Just because it comes from an administrator doesn't mean that it's wrong. Or comes from 'eggheads' at the U of A. Nothing personal, but you know what I'm saying." Teachers might think, "Well, these guys, hell, they haven't been in the classroom for ten years." Principal D said that he tried to "keep abreast" of research himself, but that after all, researchers "haven't actually tried to implement some of this stuff."

For the staff development, Principal D recommended the "brainstorming" approach he had found successful. He also remarked that "I think the situation where you have some information, techniques, things that you can use in the classroom, I think they'll turn on to it...Quick and dirty methods that help the kids, I think they'll respond to that." He also hoped that the staff development would address his concerns about dropping Iowa test scores, transient students, and a return to skills instruction in fifth and sixth grades.

Before beginning the staff development, Principal D said it would be a good idea for the staff developers to get the support of certain teachers. "You get one or two people who all of a sudden start with a negative remark and you're dead. So we want to insure that would not happen. That's not necessarily stacking the cards, but get some people involved who have some creative thinking." "The secret to combatting" teacher resistance, he said, would be to meet with a small group first, win their approval, and then go to the whole group.

The classroom observer recommended having a big meeting with the teachers and brainstorming what they thought would improve their reading instruction and what they were interested in, and "go from there." "You'd have to run it with the idea that they've got a solid start, how let's see how we can improve it." Except for one or two "outliers," she saw most of the group as eager and receptive, as long as no one "talked down" to them. "The minute you said, 'You're not doing this right, you need to do this instead,' they'd turn you off and as a group stonewall you out of the school."

CASE STUDY: SCHOOL F

I. GENERAL SCHOOL DESCRIPTION

School F was located on a fairly busy mid-town street which had once been residential, but was lately shifting toward small businesses, apartments and office buildings. The original building dated to 1929; a newer wing, to the 50s. There were 13 regular classroom teachers for a school population of 360 students in grades K-6. In addition, the staff included a curriculum specialist, half-time school counselor, fine arts resource teacher, speech/hearing specialist, and teachers for a special program for multiply handicapped students. All primary grade and special education classrooms had teacher aides, and bilingual classrooms (all primary) received additional aide time. However, the intermediate teachers in our study did not have aides. Average class size was 27.

The school building, situated on a spacious lot, was a square of classrooms surrounding a pleasant central courtyard, with the newer wing jutting out from one side. In the front hallway a large, brightly-lit and pleasant secretary's office was situated across from the principal's smaller office and the curriculum specialist's cramped quarters. This general area was filled with displays of student artwork, products of the fine arts program. The classrooms we visited had large wooden windows and bookshelves, and were potentially attractive, but had a rather outdated look.

The classroom observer reported that she found people at the school "not very friendly." The secretary seemed rather annoyed when the observer asked if she needed to check in each day, handed her a map and sent her on her way. The hallways were quiet: "It was like there was a hush over the whole place. People didn't talk together. You rarely saw anybody out in the hall." She had trouble making eye contact with teachers she met. The school had the "ugliest and puniest teacher's lounge" she had ever encountered, and the lounge seemed rarely used by teachers.

The observer saw "lots of lists of rules" in the classrooms (characteristic of schools in this district), but classroom management varied greatly across teachers. The most experienced teachers had tightly managed classrooms and calm, quiet student, but in two classrooms there was commonly disorganization and noise. On the day of his interview, the principal had two intermediate boys in his office, sent there by their teacher for misbehavior. He said that the day before, he had suspended three students, and complained about the amount of time he spent on such disciplinary procedures.

Student Population: The student population of School F was complex. Some students came from the immediate neighborhood, which the principal described as being in economic decline. This mostly-Anglo population was changing from "the standard stalwart of middle America" as he put it, to working class, highly mobile apartment-dwellers. Due to a desegregation arrangement, primary grade students were 35% Hispanic and Black and 65% Anglo.

Minority students in these grades were bused to the school from another neighborhood. After third grade, they returned to their neighborhood school, and School F's minority population for grades 4-6 dropped to 10-12%. Fifty-one percent of the primary students qualified for free/reduced lunches; only 20% of the intermediates qualified. To complicate things further, a group of predominantly Anglo students were also bused from a very affluent neighborhood -- making School F a crossroads for students and parents who otherwise would have little contact with each other in the community.

Iowa Test scores for April of Year 1 showed that School F's primary students scored at or just above the mean for the district, while the intermediate students scored 10 or more percentile points above the mean. According to the principal, there was very wide variance behind these averages, reflecting wide socioeconomic variance in the population. In fact, parents from the affluent neighborhood had complained that despite their own children's very high scores, lower schoolwide scores were affecting their property values. Some of these parents had placed their children in private schools, and the principal was trying hard to woo them back by improving the school's image. Bilingual education, a new computer room, and the fine arts program were his selling points for the school.

Principal F talked at length about the negative consequences of these arrangements for his school management. There were linguistic, cultural and class barriers among the parents, and minority parent participation was low. He said that "because of the wide diversity of students, we have to monitor student behavior more closely than some of the other schools. We have a high incidence of stealing, profanity." Many students came from homes which he termed "socially bankrupt." Because of the desegregation arrangement and high student mobility, there was little continuity in the student population. Principal F reported at the beginning of Year 2 that only 45% of the intermediate students we had observed in Year 1 had returned. Students with limited home backgrounds and high mobility were, he reported, difficult for his teachers to cope with. But he later added, "We have very special kids here. They're good kids and we're real proud of them. It's fun to work with them, even our problem kids."

In their interviews, three of the five participating teachers at School F commented on their students. Two complained about their students' behavior -- rowdiness and fighting. They also remarked that for some of their students, school did not seem relevant to their home lives. These two teachers also attributed the difference between good and poor readers to parents and the "home situation," i.e., whether there was support for reading at home. The third teacher, on the other hand, described her group positively, as "kids that come from homes where they're expected to do well and a lot of emphasis is placed on education." On the school level questionnaire distributed to all teachers at the school, School F teachers rated their students more negatively than did teachers at any of the other five participating schools.

In Year 2, the school enrolled several nonEnglish speaking students. Principal F said that this was because of a shortage of space in schools with bilingual intermediate programs, and also because these parents preferred to have their students immersed in English. When a project assistant administered the reading test to one class, she noted that a nonEnglish speaking student was not receiving adequate assistance from the teacher. The teacher's reasoning was that "they" should provide her with "help" for this student.

School History: According to the principal, School F had been in a "chaotic position" when he had arrived three years before. From his account, the school had been a place where one principal after another had been assigned just before retirement -- he nicknamed it "the farm." Shortly before he came, the school had "suffered a purge," drastic staff changes under a principal who wanted to bring in teachers more consistent with his philosophy. The older section of the building needed renovation. The principal complained that the old-fashioned lights and subfloor heating made the school gloomy and uncomfortable -- a "dungeon." However, due to a recent school bond failure, needed repairs had been postponed. "So," he said, "I came to a school that has many open wounds" and that presented him with "many, many challenges."

When we met with Principal F at the beginning of Year 2, he said that some repairs to the building had been completed over the summer, after all. However, there had not been enough money to complete the new dropped ceilings, so that new lighting fixtures were hanging from chains. The teachers' assignments and classes had changed somewhat, due to higher enrollment. One teacher was assigned a 4-5 combination made up entirely of students who were new to the school. A fourth grade teacher had a "wonderful" class, but the fifth grade teacher had an "immature" class. The sixth grade teacher, however, had the worst assignment: 36 students, most from a class which had been "difficult" the year before and which the principal now characterized as "typical sixth grade obnoxious brats." This teacher would have no assistance from a teacher aide until later in the semester.

II. INITIAL CONTACTS WITH THE SCHOOL AND RESPONSES TO THE PROJECT

School F was the last school contacted for the project. First contacts were with the curriculum specialist, who set up a meeting between the researchers and teachers and sounded very positive about their participation. However, when the researchers arrived for the meeting the curriculum specialist was absent. The principal was prepared to take her place, and escorted the researchers to a classroom to await the teachers' arrival. The five intermediate teachers -- all women, one from each grade level, one 4-5 combination, and one from special education -- gradually arrived. As they waited for the meeting, they talked about their students and classroom projects. One had

complaints about her students' behavior.

The principal seemed to have informed himself somewhat about the project in advance. He introduced the researchers by their first names, and said the teachers wanted to know what the "carrot" would be for their participation. The teachers seemed to have little advance information on the study. VRK handed out timelines and teacher letters, and briefly discussed the project, but most of the meeting was taken up with teacher questions about the design. One teacher frowned the entire time, and when she finally spoke up her question was directed to the principal: "Is this mandatory?" He said no, it would not be, and then launched into a "sales talk" for the project. He said participation would mean more resources for the intermediates, and connections (a "pipeline" as he called it) with the university. The frowning teacher asked sourly, "How would that be helpful?"

On a positive note, when VRK read the list of participating professors, the special education teacher perked up at the mention of CB, saying "She's wonderful!" Someone wanted to know how we had heard about their school. VRK responded that BW, a longtime district teacher and new principal, had recommended them. The principal recognized BW's name, and seemed pleased. Finally, the principal thanked us and said that they would talk more and let us know their response. We left with the sense that he was going to try to talk the teachers into participation. Indeed, we were informed later that they had all agreed.

When the observer met with teachers to arrange for her observations, she said that they were fairly reserved, but gradually warmed up to her. The "frowning teacher" from the first meeting, in fact, was the most friendly and helpful. She and the special education teacher stayed after the meeting to talk with the observer. At a meeting later in the year for distributing school questionnaires, the same teacher wanted to know how soon the staff development would begin. In general, the observer wrote, "The teachers here are wary of me. They don't want to talk with me after observations or share worksheet copies with me." They seemed anxious about being observed.

The principal investigators met with Principal F early in Year 2. The classroom observer had recommended that the curriculum specialist be involved in the project, since she seemed to be more closely involved with the teachers and also protective of her own influence over them. Therefore, the plan was for her to also attend this meeting. However, when we arrived she seemed to be busy on another assignment.

After hearing a description of the staff development, Principal F suggested that we conduct a survey of the teachers to find out their preferences for times and compensation for participation. "Teachers will want to know the bottom line," he explained. Principal F talked at length about how three of the teachers would make a "great team" because they had participated together in a substance abuse workshop over the summer, and gotten to know each other much better. The workshop had also greatly improved his relationships with these teachers, he said. (Later he remembered that a fourth teacher had also attended the workshop, but he apparently did not include her in the "team"

feeling.) The fifth teacher, who had not attended the workshop, might be "threatened" by the staff development, he thought. However, he said that she "needed to be threatened" in order to change. When PA said that this would be the first attempt at this type of staff development, Principal F said that with this group it would be a "trial by fire."

When the project assistants administered the reading test during the fall of Year 2, they noted some negativity in teacher-student interactions in three classrooms. In one classroom, teacher-student relationships seemed to have severely broken down, and both assistants who visited this classroom expressed strong concerns. However, the students on the whole were cooperative and friendly during testtaking.

III. PRINCIPAL F

A youthful fortyish man, Principal F struck the observer as being energetic and enthusiastic. Though he greeted her on her first day, and gave her a tour of the school pointing out its positive features, she rarely saw him after that. As she put it, "He was just not visible." She got the impression that his contacts with teachers were infrequent and his relationships with them were not close.

Principal Background: Principal F talked extensively about his background and what he had learned from each job experience. He had grown up on the east coast, and said that he had always wanted to be a teacher and a principal. He had come to the local university to study education. For his student teaching, he had been placed in a 3-4-5 combination classroom with a group of "behavior problems -- kids nobody else wanted." As Principal F put it, "It was a real difficult situation, but because of that strong challenge, I felt it was a good experience for me." He then taught in third through sixth grades, first under the wing of a principal who mentored him toward "bigger and better things," then for ten years in a school with very affluent, high achieving students. He contrasted the almost unlimited privileges of these students' lives with the limited backgrounds of many students at School F.

After completing an administrative internship, Principal F was hired as district ombudsman -- a real "hot seat" as he described it. "But yet, it's a beautiful job in the sense that you know everything that is going on in the district." In his opinion, "It was my best training as a principal, because my skin became a lot tougher...Up to that point I was a very sensitive individual." From there he moved on to an assistant principalship at a new magnet school which was "in a lot of turmoil," and from there to School F, where he was in his third year (though it "felt like 30"). He said that he had been directed by the district to turn the school around -- another tough assignment.

Principal on the Principalship: Principal F's view of the principalship was that it required someone who could deal with

complaints and adapt to new situations. He also said that he spent an inordinate amount of time on procedures and paperwork, much of it related to student discipline: "Every time a child is suspended it takes 45 to 60 minutes to do the paperwork, contact the parents, and that's...yesterday there were three kids who were suspended. That's three hours worth of work. So the day is shot." He also had paperwork to complete for the K-3 program, desegregation, and special education, and parent contacts to make. He wished that he could spend more time in the classroom, since he missed teaching and thought his presence "would improve the support and it would also help the discipline." In his opinion, "I'm not as much the instructional leader as I should be, I would like to be." However, the principal counted himself fortunate to have a curriculum specialist at the school who was "totally immersed" in instruction.

Principal's School Goals: When he first came to School F, the principal said, his first job was to establish a three year plan of change. The first-year goal was public relations, improving the school's "reputation," especially to draw affluent parents back to the school. In his words: "We had to show them that we had quality programs, that we had quality personnel, and that we really cared about the kids." He worked on building school pride through mottos, a school history project, and redecoration. The second-year goal had been "curricular improvement" -- "developing special programs to make us unique." He described a school garden project, a lunchroom salad bar, the computer room, and the fine arts program. In the third year, staff changes were the major goal -- "To weed out those people who really didn't want to be here or who are not sensitive to the needs of the kids." Some teachers had been transferred, some had left, and the new staff were "creative, talented and highly motivated."

Principal Remarks on Teachers and Teaching: His New England upbringing, Principal F felt, gave him a "strong humanities background" which influenced his ideas about teaching. He was interested in what he called the "cultural aspect" of education. At the affluent school where he had taught before, he had attended several student bar mitzvahs. The students there also had "unbelievable" cultural experiences that he could build upon in his teaching -- experiences most School F students did not have. "But yet," he argued, "the things that worked at [the other school] would work in part here and probably more so, with the ones who are really capable of dreaming, seeing and feeling different things."

Principal Influence over Instruction and Teacher Change: Principal F said he had avoided direct intervention with teachers: "I've been very careful. When I came in I had my three-year plan that was totally mine. I was told to come out here and do a job and hit them over the heads with a two-by-four if I had to, to get the job done, because the school was festering. I've been very cautious about going into the classroom telling people

what to do. Gradually, I see them coming around. I give suggestions but I haven't gone in and mandated anything." He gave beginning teachers released time from the classroom to observe veteran teachers, to learn from their peers. But he did not discuss any direct guidance he gave teachers regarding their instruction. He had been preoccupied more with the overall climate and organization of the school.

While he had made many of the major decisions about school improvement, Principal F had also involved teachers in direction-setting. On two occasions he had held whole-staff meetings for discussion of school problems and goals. But these meetings, as far as he described them, did not involve instructional or curricular decisions.

Principal F discussed his evaluation of teaching only briefly, saying: "I do some scripting and I point out many positives that I see and we talk about the negatives, things that I would like to see. Put in suggestions about how to handle discipline, how to go about handling reading groups. Pass out literature on successful techniques that have worked for other people. Peer observation, released time available." I.e., he did not discuss any specific directions he had for instruction or teacher change.

Principal Perceptions of District Influence: Principal F had complaints about district politics, especially surrounding desegregation and bilingual education. For instance, Anglo parents were attracted to the school with the promise of Spanish language instruction for their children, but then found that it ended after third grade. Bilingual education at School F was merely a function of desegregation in the primary grades -- not a serious school commitment to the ideal of foreign language learning. He also complained about district-required paperwork and inequities in the distribution of resources for primary and intermediate programs. In his view, the intermediate program at School F "and also the intermediate programs throughout the state have suffered because of the K-3 program." He thought that the K-3 department was pushing whole language instruction, and would like to see whole language in the intermediate grades, as well. "You control the purse strings, you can control the power. And they have thousands and thousands of dollars that they're spending."

At our initial meeting for Year 2, Principal F again complained about the district. Lack of funds was the district's excuse for some recent cuts in bus service which had brought on numerous parent complaints. At School F, budget shortages meant that the needed repairs to the building were only half complete. Principal F said that the "public was getting fed up with the budget issue" in the district, and that was why a budget override was likely to fail. He thought there was "fat" in the budget that the recent cuts were not touching.

As reported above, achievement test scores were a source of concern for Principal F. Though the school scored respectably in the top third in the district, he thought that the tests influenced teaching at the school "probably a great deal."

"There's always the fear that your scores are going to be published and that you're going to be held to close scrutiny, and nobody wants to be embarrassed by having the lowest scores of the schools in the area or the district...It has to be some kind of stigma." And if a school had very high scores which then dropped, the staff would be blamed. "When you're in the middle, that's fine...but when you're at the bottom or the top, you're in a pressure cooker." On the other hand, he was attracted to the competitive aspects of the tests. He thought the school this year had a "golden opportunity" for the sixth grade to score high and push the school "way up in the standings." He described himself as a "real competitor. If there's a game to be played, I'd like to be in the top nine or ten percent...But I don't want to lose sight of the overall reports of the program." Test scores are just one part of it."

Teachers on the Principal: The participating teachers at School F made few comments about their principal in their interviews. One teacher compared him unfavorably with a former principal at the school, who had given her support for trying new ideas. According to her, Principal F would say, "You have to teach them the book every day. That's the way it's done." However, she did not seem to be complaining that Principal F was actually constraining her decisions. In fact, she thought that he had little idea of what she was doing in the classroom. What was missing was the kind of support for innovation the former principal had given. The only other teacher comment about Principal F related to sending students to the office to be suspended.

Another teacher talked about the pressure of the Iowa tests at this school. Her comments seemed to echo those of Principal F about the pressures of achievement testing: "Nowadays, we do have that little noise lurking in the back of our head, reminding us that we're going to have this Iowa test, and these kids have to get ready for that test. And yet, here we are with the curriculum that you can't hurry through...do we stop doing some of the things we were doing, because we have to teach for that test, because monies are based on that test, status is based on that test, parents sending their kids to a school based on that test. Reputations are based on that test. And it just doesn't seem right." Principal F contrasted starkly with Principal A in his position on this teacher dilemma.

On the school level questionnaire, teachers at School F were the most negative of teachers at all six schools in their ratings of the principal's leadership, interaction related to instruction, and teacher evaluations.

III-A. CURRICULUM SPECIALIST AT SCHOOL F

The curriculum specialist at School F appeared to have closer and more frequent contacts with teachers, and perhaps more influence over instruction, than the principal. At her initial meeting with the teachers, the classroom observer noted that the specialist announced repeatedly that she had put materials about

reading comprehension in teacher mailboxes. She arranged all special activities at the school: field trips, visiting artists, athletic events, fundraisers, reading contests, etc. The observer did not see her as having much direct influence over the reading program in the classrooms, but thought she would be a key person for facilitating access to the teachers.

Curriculum Specialist Background: The curriculum specialist was a very soft-spoken, controlled and competent-seeming woman who had been an elementary classroom teacher in grades K-4. After a principal internship, she had been hired at School F just this year. She said she had a tendency to change jobs whenever she wanted a new challenge. Over the years, she said, she had also been attracted to each current trend in teaching as it came along -- team teaching, open classroom, centers -- and of all of these had decided that teaming was of enduring value. She liked the idea of teachers teaming in the content areas, and being able to use good lessons with more than one group.

Curriculum Specialist Remarks on Teachers and Teaching: As a teacher, the curriculum specialist had had a high sense of her own efficacy. She had deliberately volunteered to take the "lowest group" in one school, "because I felt I could build self-esteem and make them feel very good about what they were doing." When she was teaching, she said, the district offered her no guidance -- "They didn't give me anything as far as sequence of skills or anything." Therefore, she had made up her own curriculum. When she took a kindergarten assignment after several years, she found out that students "start out perfect. So it's the system that does something to them." In kindergarten, she estimated that out of sixty children she had perhaps three with serious learning problems.

Throughout her interview, the curriculum specialist contrasted beginning and experienced, and what she called "conservative" and "open" teachers. While she had described herself as a very changeable teacher, she thought that teachers in general were on a continuum of experience and development which moved very slowly. When she was teaming with other teachers, she found that "most of the teachers would still do the conservative teaching styles," which she characterized as "doing a little bit of everything" rather than "integrating" all areas. She thought that it "took a long time" for teachers to learn to integrate their curriculum, to work together collaboratively, or even to "change one little thing."

Teachers, she said, were more open to "add-ons" to their present way of doing things than to fundamental, drastic change. As a result, change sneaked up on them: "What they don't realize is that if they put on enough add-ons that they've changed their program." Teachers might need a series of demonstrations and step-by-step trials in order to adopt a new technique. The true test of a new idea was whether it worked in their own classroom.

Curriculum Specialist Influence over Instruction and Teacher Change: Her duties did not include teacher evaluation, but the

curriculum specialist said she was "constantly" in the classroom demonstrating new teaching ideas. As she put it, "I find when I do things...and teachers see that they like it and [students] respond well, they'll follow up on it and they'll continue." The teachers, in fact, wanted her to come to their classrooms more often than her other duties would allow.

Curriculum Specialist Perceptions of District Influence: The curriculum specialist thought that the district was "really afraid" to go in any particular direction, because of its size and diversity. She did not perceive district personnel as pushing teachers hard to conform. In reading, schools and teachers were divided, she said, between whole language people and basal people and people in the "middle of the road." "The district, if you can imagine, has to please all of these people." District staff seemed to be thinking that adopting a literature-based basal series would unify everyone, but she thought this was wishful thinking. The whole language people were very strong, especially in the K-3 department, and they would not be satisfied with this option. The K-3 department in her opinion provided most of the "strength" in the district reading program, and most of the available teacher training.

According to the curriculum specialist, achievement tests were not the major concern of the teachers at School F. Intermediate students especially did very well on the tests, because the teachers were careful not to let anyone "fall through the cracks." They worked hard to bring their low achievers' skills up, and as a consequence "they don't have someone who will bring the group way down" on the test scores.

Teachers on the Curriculum Specialist: In their interviews, two teachers commented positively on the curriculum specialist. One remarked about how "lucky" they were that the specialist facilitated sharing of materials, ideas, and notes from workshops among the teachers. Another talked about how the specialist had come into her classroom to techniques for building student writing into the curriculum.

IV. TEACHERS AND TEACHING AT SCHOOL F

Observations of Teachers: During her visits, the classroom observer noticed little communication among teachers, though teachers seemed to quietly observe what others were doing -- to "keep tabs on each other," as she put it. They were usually able to tell the observer where to find a teacher she had come to talk with or observe. The unpleasant teachers lounge was not conducive to socializing. The only teachers who regularly congregated at this school were those who smoked. They sometimes could be found in a smoking lounge off the cafeteria. Otherwise, School F teachers did not seem collegial. She did not see any evidence that the teachers coordinated their instruction or classroom management with each other. The observer said, "I'd go at a certain time everyday when they had their breaks and they were still all in their rooms." She added that she would warn a

new teacher at the school about "loneliness...I didn't see a willingness to share...It'd be a real isolated place."

Principal and Curriculum Specialist Descriptions of Teachers: Principal F said that when he first came to the school, he found teachers who were not working together, who were "doing their own thing." The program had no overall "cohesiveness," since the primaries and intermediates were split. After a series of principals who had lasted only a short time, the teachers were cynical about the arrival of a new one. In his opinion, they were "floundering."

He described the teachers as having an extremely wide variety of teaching styles -- "rigid," "creative," "integrated." He estimated that the teachers made most (75%) of their instructional decisions individually. What they had in common, in his view, was "the importance of reading, the importance of doing well on the Iowa Test -- they're very conscious of that. Differences would come in style of presentation, philosophy, attitudes, enthusiasm." Some of these differences, he predicted, would "bring a smile" to the observer's face. However, he did praise the teachers for having "good hearts."

Principal F saw a "definite break" between primary and intermediate teachers at the school. Because of desegregation, there were twice as many primary as intermediate teachers. The intermediate teachers were isolated and had "grown together" as a group. The intermediates were also mostly "veterans," with seven to twenty-plus years of experience, while there were more beginning teachers among the primaries. The intermediate teachers, therefore, were less likely to visit each other's classrooms for peer observations. In addition, the primary teachers received many more resources and more released time for training than the intermediates, through the K-3 program. In the principal's view, though they understood the eventual benefits to them and had been generally "magnanimous," extra attention to the primaries had caused some unspoken "jealousy or resentment" among the intermediates. As he expressed it, "We all need strokes."

The curriculum specialist agreed that the intermediate teachers had been "left out in the cold" by the district. Trainings and released time for intermediates were almost "nonexistent." In her opinion, the intermediate teachers could do some of the same things the primaries were learning to do -- "they just need motivation." The intermediates wanted to "liven up their programs and need the means to do that and the knowledge to do that. They're really willing to try new things and would like to try some new things, but getting access to those things is another story." She thought that the principal bore some responsibility for the primary-intermediate split, for not trying hard enough to build "continuity" between the two groups.

Rather than working as a team, which the curriculum specialist would have preferred, the intermediate teachers worked as "a collection of individuals, because no one has helped foster the group concept. It takes a long time...The teaming is difficult when personalities are very different." She and the principal cited only one instance of teaming in the

intermediates, between the special education teacher and a regular classroom teacher.

Teacher Comments on Teachers and Teaching at School F: In their interviews, four teachers talked about the lack of teacher collegiality at School F. One described how the school layout was not conducive to teacher contacts. Teachers from different wings did not see each other often or know each other well. The new wing, she said, was "like the other end of the world." The teachers lounge was too small for meetings. Another teacher contrasted School F with a school where she had worked before, where teachers often visited each others' rooms and stayed after school to work together. The third teacher said that she did not have much contact with other teachers because she had a difficult class to handle this year. Still another teacher said that it was hard for teachers to collaborate at School F, because there was only one teacher at each grade level.

Teachers reported that staff meetings were the only time that teachers regularly congregated. They had not done inservices together as a staff, except for those related to desegregation. One teacher contrasted the limited opportunities provided to the intermediates with the frequent inservicing provided for the K-3's. On the positive side, the curriculum specialist had facilitated some exchange of ideas among teachers and distribution of ideas from workshops. And the special education teacher was working with another teacher in reading, switching students between their classrooms.

Questionnaire responses bore out our observations and the teachers' comments. Teachers at School F scored lowest on frequency of staff contacts, a measure of teacher isolation. They consistently rated their school more negatively than the mean for all schools as a work environment. Their responses were also the most negative of all schools on levels of teacher participation, positive responses to inservices, and the school as a place where there are opportunities to learn.

V. READING AT SCHOOL F

Observations of Reading: From the classroom observer's point of view, "there was no concerted effort to do anything with reading" at School F. For instance, while other schools she visited really "geared up" for Love of Reading Week, the observer saw very little going on at this one. The library -- a dark, narrow room not much bigger than a classroom -- seemed little used and appeared outdated, drab, and poorly arranged. There was just a half-time librarian. The observer noted that only one of the teachers had many books for students to read in her room.

According to the observer, there was diversity in reading instruction at School F. One commonality was that students were not extensively subdivided into reading groups. There were two reading groups at most or whole class instruction. All teachers used the basal reader, but this varied from sole reliance on the basal for reading to brief use of only the skill charts by one teacher. This teacher, who stood out as different, assigned

groups to read various trade books and emphasized reading for understanding. A few students from one classroom visited the special education classroom for reading; the teachers called this "reverse mainstreaming."

The Principal and Reading: Principal F reported that in his student teaching assignment, he had encountered students who could not read and who had very low self-concepts. He decided to try some of the language experience ideas of Roach Van Allen with his low reading group. They made a film of a story they had read, and showed it to their parents. Principal F recalled that he "saw their whole personality change" through this activity, and at that point realized that the language experience approach was the way to go. When his first teaching assignment took him to a very affluent school, the "gifted, mature, sophisticated" children there could handle even more "challenging" assignments.

Therefore, experience had taught Principal F that "the basal reader is not the be-all and end-all, and [students] do much better without it." But when asked if he advocated discarding the basal in favor of language experience at School F, he replied that "No, it would have to be a combination. We do have some youngsters with 1 and 2 stanines, very very low. Socially deprived at home, socially bankrupt. They don't bring much to the classroom." Besides, he argued, it would be very difficult for veteran teachers to give up their basal readers, or even to incorporate something new into their basal-centered program.

The Curriculum Specialist and Reading: The curriculum specialist said that as a teacher, she had done "pretty much the reading groups and added creative things to it. I still used the basal as my skill development." She had made up her own skills sequence charts and word attack activities, and had considered phonics to be important. In her opinion, the basal readers could be made enjoyable and meaningful to children, if a teacher used them creatively and flexibly. She had also tried the language experience approach, but as a "literature enrichment type thing rather than the whole program."

Though whole language was "really catching on" through the influence of the K-3 program, and she was familiar with its concepts and strengths, the curriculum specialist did not think she could "buy into" a whole language reading program. "Integration is very difficult. It's a wonderful concept and whole language is a wonderful concept, but until a teacher has years of experience, it's hard. You have to know your material to be able to do that." She saw problems with beginning teachers trying to use the whole language approach, though experienced teachers could pull it off successfully since "an experienced teacher doesn't need a basal." But some experienced teachers "could not withstand that type of program because they need things so disciplined and structured, because their personalities are so."

In her experience, the curriculum specialist said, reading was "almost sacred" to teachers, and changes in reading instruction were difficult to make. Experienced teachers became

defensive at the suggestion that they did not know how to teach reading. They were more open to new ideas in science, in contrast, because they did not consider themselves knowledgeable about science. The "whole language thing" was attractive to many of them not as a radical change in teaching practices, but as an "add on" or enrichment to their usual practices.

She also thought that switching back and forth from "open" to "conservative" styles of reading instruction was difficult for children. There should be two strands of curriculum and instruction available, and children should be placed in the strand that would work best for them. She observed that it was a tremendous waste of money for the district to buy reading books and workbooks for the "open" teachers who did not want them, and that having two strands would eliminate this.

The principal had not mentioned any recent influences over his position on reading, but the curriculum specialist said that she went to "every conference I possibly can, whether reading association or whole language or whatever." She said she was trying to update herself in reading, after having taught kindergarten for several years.

Principal and Curriculum Specialist Descriptions of Reading:
Principal F said he had observed differences in reading instruction between the primary and intermediate teachers. The primaries focused mostly on phonics and the basal reader, and tended to have three or four reading groups. (Interesting, considering the "whole language" K-3 program was supposed to be so influential.) The intermediates tended not to have so many reading groups, downplayed phonics, tended to use more outside reading sources and had "more emphasis perhaps on a whole language approach." Other than that, there was great variability in teaching "styles."

The curriculum specialist had also observed differences among the intermediate teachers, and attributed these to "teacher personalities." She also had observed some primary-intermediate differences in reading instruction. Reading was the core of the entire primary program, "about the only thing they want to do all morning." Intermediates had more content area instruction.

The library at the school presented a "tough situation," the principal said. He wanted a full-time, bilingual librarian, and more bilingual books, but these would not be forthcoming from the district, given the budget crunch. He did not see the library as receiving "maximum use" among the intermediate teachers, perhaps because of scheduling difficulties.

Principal and Curriculum Specialist Objectives for Reading:
The principal was rather sketchy in describing any changes he would like to see in the reading program. He said that he "would like to see more emphasis on humanities," on reading and memorizing classic poems, and on incorporating literature and history.

The curriculum specialist was much more explicit. She said that "the approach that we're going with is to try to encourage more and more writing next year and to try to increase reading

and writing. Then the ideal thing is to integrate other subjects, too." She was trying to show the intermediate teachers "that they can use their social studies book as a reading tool and tie that in with writing." As an example, she described a demonstration lesson she had done in one classroom, tying a social studies assignment to a writing assignment. In her words, "I think the teachers have to start seeing that reading from nine to ten doesn't mean they have to be reading literature or basals." She also wanted to get across the idea that "true books" (nonfiction), science and other books besides the basal, could be counted as reading. "But it takes a long time."

On her own, the curriculum specialist had begun a reading incentive program for students. The current program was designed on the format of a treasure hunt, with each class having a ship on the cafeteria wall which advanced toward the treasure as they read more books. The class which was first to reach the destination would get to participate in a search for prizes in the neighborhood. She also planned to have a representative of the public library's summer reading program come to the school to talk with students.

Teachers on Reading at School F: Teachers at School F had little to say about reading as a school level activity. Two of the teachers explained in their interviews that they were unable to say if there were commonalities in the teaching of reading at School F, because they had little contact with other teachers. The guesses they made about this were that most teachers used the basal reader, and that most had reading groups. One teacher saw the principal as pushing them in this direction, and another thought that the new group of primary teachers had brought more continuity to reading instruction. Only one teacher mentioned Love of Reading Week as a schoolwide reading activity, and another mentioned working closely with the librarian.

VI. RESEARCH AND STAFF DEVELOPMENT THEMES

Asked about the responses of teachers to research, Principal F said that "if there's a carrot involved, it will go well." He also advocated a "nonacademic" approach, with lots of "experiential evidence [and] input from teachers about how they want to spend their time." Success also depended on "how the researchers talk to teachers...the rapport has to be there or else you lose them." He predicted that one or two would respond with "blank stares" at first. Another factor in their credibility with teachers would be the recency of the researchers' classroom experience -- "are they bonafide master teachers or eggheads who live up in the ivory tower at the university and get their information from books?" Finally, he thought the currency of the research would make a difference, since some popular speakers went around citing old research on the "rubber turkey" (chicken?) circuit.

The curriculum specialist thought "the only way [teacherr] would actually use research is if they get an inservice and they don't really realize it's research." In her opinion, teachers did

not want to hear about the "facts behind it, that it's been proven, it's been tested, and that." She would work from the angle that something will "actually work with students," and that this can be demonstrated in the classroom. Teachers would, in essence, "test the validity" of research. She added, "And I think business would tell you the same thing -- don't tell me research, tell me how I can apply it."

For the staff development, the principal's recommendations had mostly to do with "nonacademic" benefits for the somewhat neglected intermediate teachers -- getting time off, going off campus, having lunch. "I'm sure they would be very receptive and it wouldn't cost that much. It would be less than \$300 for the whole day for five people and lunch." Asked what role he would take in the staff development, Principal F asked, "What are the other principals doing?" He said he would most likely coordinate the logistics.

The curriculum specialist said that for years staff developers had just presented information, and "it doesn't work, because [teachers] will listen and then if they don't buy into it, nothing happens." She also recommended taking the teachers away from the building, exposing them to "hands on" activities, and giving them ample, extended time to talk and share, "rather than just having to listen." From her experience, the intermediate teachers would be excited about the staff development, because they were hungry to know about the latest "buzz words" and programs. She was going to prepare them by giving them articles on reading comprehension to read over the summer, so that they could ask "intelligent questions" at the staff development.

The classroom observer said of the teachers at School F, "I think if they were once given a chance to come together and do some talking they'd love it...I get the feeling that no one has ever attempted to do much with them...Because I think that they like each other as people. I just don't think they have any avenues of communication." The most experienced teachers, however, might be resistant to changing their methods of teaching reading. They would not respond to someone who said, "Let's replace everything you're doing and start from scratch." The curriculum specialist might also be resistant, in her opinion, if she felt her influenced to be "threatened" by the researchers. But if enlisted by the researchers, she would be the project's "best advocate."