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THE IMPACT OF A PROFESSIONAL DEVELOPMENT PROGRAM
CO-DEVELOPED BY MIDDLE SCHOOL TEACHERS AND COLLEGE FACULTY:
A QUALITATIVE STUDY OF TEACHER-INITIATED CHANGE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for
the Degree Doctor of Philosophy in the Graduate
School of The Ohio State University

By
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****

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This qualitative study explored the experience of twenty-eight teachers from three middle schools who participated in a professional development program co-developed by teachers and college faculty. A partnership grant between the liberal arts college and the suburban school district provided tuition for most of the teachers participating. The purpose of the study was to gain teachers' perspectives of the value of the program for practicing middle school teachers who have not been prepared for teaching in the middle school. Research was guided by these questions: "What might the impact be of a professional development program for middle level educators on the teachers who participate?... on their schools?...on their school district?"

Data collection, which consisted primarily of document analysis, interviews, and observations, was facilitated by the researcher's involvement in the program's Design Team and her role as one of the two instructors of the courses.

Data collected throughout the eighteen month study were analyzed by school and across schools. Case studies of each middle school documented substantive changes initiated by teachers in the program. Analysis of data across schools revealed that (1) teachers became learners, (2) teachers were challenged to think in new ways, (3) teachers gained confidence and felt empowered, and (4) teachers became willing to initiate change and overcome roadblocks.

The researcher concluded that this professional development program for middle school teachers contributed to personal and professional growth, facilitated the development of a new "culture" of advocates for young adolescents in the school district, and provided an impetus for teacher-initiated change in their middle schools. This study has implications for the professional development of middle school teachers, the role of
teachers and higher education in initiating change in schools, and middle school reform. This study also documents unanticipated benefits of teachers and pre-service teachers in the same courses, an area for further study. Finally, this study suggests a model for an action-based professional development program that can impact middle school teachers, their schools, and their district.
This work is dedicated to the teachers
who brought the Middle School Strand to life
and made a difference in their schools
and to my father
The Rev. Dr. Quentin C. Lansman
who inspired me.
ACKNOWLEDGMENTS

I would like to thank the special people in my life without whom I could not have completed this project:

- Steve, Mike, Lindsay, and Andrew, and the rest of my wonderful family, for their love, support, and patience;
- Dr. Patricia Brosnan, my advisor and mentor, for being so encouraging and helpful;
- Dr. Diana Bartlett, for providing friendship, pep talks, and valued assistance as a peer reviewer;
- John Swaim, my colleague and friend, whom God brought to Ohio just for this project;
- Kim Harris, my dear friend, who stayed beside me during the darkest hours and believed in me, and who read and edited every word;
- Rademachers, Klenks, Hedges, Heigles, and McMeekins, for providing needed breaks, vacations, laughs, and sometimes technical assistance;
- Friends and colleagues at Otterbein College, Church of the Messiah, and the Greater Columbus Emmaus Community, for their love, support, and prayers; and
- My mother, Darlene Lansman Chitwood, who has always been my role model for hard work, commitment, and the pursuit of excellence.
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I have been waiting for years for someone to fix our middle school. It suddenly occurred to me during this Strand that no one was going to do it for me. I had to do something myself.

Participant, Middle School Strand

Change in schools, in spite of the best intentions of administrators, state departments of education, legislators, and teacher education institutions, does not happen until teachers believe in it enough to make it happen. Changes may be mandated, and the organization may be manipulated to look good, but the bottom line is the teacher. Without a commitment from the teacher, substantive change will be illusive at best.

Personal experience and professional literature have strengthened my belief that individual teachers can either initiate or inhibit change. In the early 70s I taught in a new junior high school (7th, 8th, and 9th graders) with a young, enthusiastic staff, who I assumed were open to new ideas and willing to try anything. I volunteered to be on a 4-person social studies/language arts team in an open space with double period blocks, and we tried a variety of curricular innovations, teaming and teaching strategies, and ended up with quite a successful, non-traditional program which attracted many outside visitors. None of our peers/friends in our own building ever expressed any more than polite interest, none ever observed, and eventually, as the original team left, walls were built and the open space was converted to traditional classrooms. Thus, I learned that close proximity to innovation does not necessarily mean that anyone else is going to buy into it.

This continued to perplex me until I began my doctoral studies years later and I read professional literature on change and reform in schools. I began to understand why.
in spite of the presence of a few of us more adventurous or foolhardy souls, most of the staff in that building felt perfectly competent and satisfied to teach the way they had been taught. It seemed they had little motivation to change; there was certainly no incentive to buy into what we were attempting.

My move from the classroom to teacher education forced me to reexamine how change occurs in school. If I had not been successful inspiring anyone else to change as a teacher, how could I ever have any impact on change in schools now that I was even further removed? I determined there were primarily two avenues to pursue: 1) prepare pre-service teachers to not only teach in the middle school but be change agents as well, and 2) provide practicing middle school teachers a voice in their own professional development, encourage them to clarify their beliefs about young adolescents and middle schools, and empower them to implement those beliefs in their own schools.

As a result of several years of conversation with college faculty and middle school teachers and administrators, a series of courses on middle level education was co-developed by college faculty and teachers. This series of three courses, or Middle School Strand, would provide a common knowledge base about young adolescent development and middle school philosophy while bringing together middle school practitioners and pre-service teachers as learners to examine personal beliefs and current practice in middle schools. An initial week-long Middle School Institute would be offered the summer before the Strand to perhaps involve more teachers and to "sell" them on the idea of the Strand.

The intent of this study was to give voice to the teachers in this new professional development program as they clarified their beliefs about young adolescents and middle school, as they reflected on the current status of middle level education, and as they confronted dissonance between their beliefs and current practice. I wondered what their response would be. Would they see differences between their beliefs and practice? Would they attempt to change, or even attempt to change others? I believed that teachers and college faculty could design a program that would enable and motivate teachers to initiate
change in local schools. I believed that unless teachers became committed to middle school reform, it would fail.

Background for the Study

Three factors prompted this study: theoretical issues concerning middle level education and educational change, which will be discussed in depth in Chapter 2; the interest in and commitment to middle level education on the part of my teaching partner John and me; and the context of the study, including the status of middle school reform in the district from which the teacher/participants were recruited. To further the understanding of the reader, therefore, I will review (1) the history of the middle school program at Otterbein College, (2) the context of the study, and (3) the development of the Middle School Institute and Middle School Strand, including an explanation of the Design Team and a description of the purpose and content of the courses comprising the Institute and Strand.

History of the Middle School Program at Otterbein College

While middle level research and theory has suggested for over thirty years that young adolescents, ages 10-14, need committed and knowledgeable teachers who are prepared to teach them, teacher education institutions and state boards of education have been slow to respond. This is discussed in depth in Chapter Two. My personal experience teaching 7th, 8th, and 9th grades as a secondary-prepared teacher affirmed this. The Education faculty at Otterbein College began to discuss this oversight in 1989 and moved to establish a Middle School Advisory Committee made up of middle school teachers and administrators from one urban and five suburban districts to share what they considered essential knowledge and skills for an effective middle school teacher.

In 1992, the state of Ohio for the first time provided middle grades certification for teaching grades 4-9. While this certification overlapped with both elementary 1-8 and secondary 7-12 certification, it at least brought preparation of middle grades teachers into professional dialogue. My doctoral work in 1994-95 focused on middle level education
and teacher education, adding to my determination to develop a program at Otterbein. The following year a nationally-known middle level educator joined our faculty, and the two of us began writing a middle grades certification program for pre-service teachers. It was not very long before we realized the potential this program might have for practicing middle school teachers, and we began developing a strand of middle school courses that would bring together middle school practitioners and pre-service teachers to study young adolescent development and middle school research and theory in light of current practice. Not only would this program be the core of our undergraduate program for middle childhood licensure for grades 4-9, but it also would allow graduate students to specialize in middle level education. We planned to pilot the new middle school courses during the 1996-97 year.

**Context of the Study**

During the previous year, Otterbein received a large grant for a school/college partnership with two central Ohio school districts. One of the districts, Meadow Park (pseudonym), was very interested in our middle school program, and the grant would provide tuition for interested teachers from the three middle schools.

Some background information about Meadow Park and the three middle schools is necessary to establish a context for the reader to understand the results and conclusions of the study that will be presented later in this paper. Meadow Park is a lower to upper-middle class community with a population of approximately 35,000 on the edge of a large metropolitan area. While the community is mostly Caucasian, over the last ten years the population has become slightly more diverse, both in ethnic and socioeconomic representation. Community people have high expectations for the schools, but school personnel have to work very hard to get levies or bond issues passed. The school district for the most part has an excellent reputation academically, though some feel it is overrated. Teachers and administrators have told me that the district is not as progressive as it once was, offering several conjectures as to why it may have changed which are not germane to
this study, such as the politics of the central administration and the strength of the teachers' union.

Westgate Middle School, Valley Middle School, and Union Middle School (pseudonyms) were built in 1960, 1969, and 1986, respectively, paralleling the tremendous growth the district has experienced over the years. Westgate and Valley opened as traditional junior highs, with 7th, 8th, and 9th grades, and Union opened as a middle school with grades 7 and 8.

In 1989, the district decided to create "middle schools" in all three schools, moving 6th graders to the middle schools. Ninth graders had previously been moved to the high schools. In written and verbal communications to the community and parents, the district introduced them to the middle school concept, proposing to transform the schools in such a way that they would be more responsive to the needs of young adolescents.

Key to this middle school concept was interdisciplinary teaming, i.e., grouping several teachers from different subject areas who would share the same schedule and the same students. Teaming was to be introduced in the sixth grade the first year, 7th grade the second year, and 8th grade the third year. However, teaming never went beyond the 6th grade, only the briefest in-service was offered to teachers, and the middle school concept was never really implemented. The transformed "middle schools" were, in fact, middle schools in name only. Many teachers were very disappointed, and looked forward to the time when middle school reform might continue.

As the community continued to grow, all three middle schools experienced serious overcrowding with approximately 1000 students in each school. This overcrowding became the number one reason touted by the district as an explanation for why middle school reform had not occurred. In 1995, the community voted to build a fourth middle school.

I chose Meadow Park for this study because it presented, in my opinion, a rather typical scenario in which a district made a verbal commitment to the middle school concept
and reconfigured grade levels, but went no further. The middle schools still resembled traditional junior highs more than true middle schools. The difference between the two will be explored in depth in Chapter 2. The teachers and parents seemed receptive to the idea of change, but it never materialized. I wondered if the opening of a fourth middle school would again engage the district in the discussion of middle school reform. I wondered how committed the teachers really were to change.

It was in this context that I visited all three middle schools and presented an outline of Otterbein’s plan to pilot a professional development program for middle school teachers. Teachers would be involved in planning the entire sequence to fit their needs. Tuition would be paid the first year by the grant that the district and the college had received.

Development of the Middle School Institute and Middle School Strand

The Design Team

I recruited one teacher from each middle school to be on the Design Team with my teaching partner John and me. I knew all three of the Design Team teachers professionally, and I knew they were reputed to be excellent teachers, highly regarded by colleagues, students, and parents. The Design Team met for eighteen months, from the initial planning stages of the program to the final stages of evaluation. The Design Team teachers became key informants in the study, and the data I was able to collect from them through Design Team meetings, reflection papers, journals, and interviews, as well as informal conversations, were pivotal to the study and to the development of the Institute and the Strand. The leadership role they came to play in the Strand and in their schools became an important aspect of the study.

Middle School Summer Institute. June, 1996

It was the Design Team’s task to develop a week-long Middle School Institute as the introductory course to the rest of the program and to recruit teachers for the Middle School Strand. The Institute was designed to provide practicing middle school teachers with an intensive exposure to the latest resources, professional literature and research on
middle level education through readings, speakers, and class discussions. Change process was examined, including roadblocks to change. Participants were given an opportunity to share best practices from their schools, and to identify areas in their schools in need of improvement. Action plans were developed by teachers for their respective schools during the week, and the teachers presented their action plans to their principals on the last day of the Institute.

Middle School Strand, 1996-97

The Middle School Strand consisted of three sequential courses, all of which were developed by the Design Team, with ongoing input from the teachers participating. These courses included: Responsive Schools for Young Adolescents (Fall 1996), Curriculum for the Middle Grades (Winter 1997), and Instruction for the Middle Grades (Spring 1997).

Responsive Schools for Young Adolescents. This course covered the nature and developmental needs of young adolescents, characteristics of responsive middle schools, resources for middle school practitioners, and characteristics of effective middle school teachers. Reflection on personal beliefs, research, theory, and practice was encouraged. Participants designed an advocacy plan for young adolescents in their schools. Teachers served as mentors for pre-service teachers in the Strand, providing observation sites in schools, and engaging them in dialogue about critical issues in middle level education. The ongoing implementation of action plans developed in the Institute was an important focus of the course.

Curriculum for the Middle Grades. The second course provided participants the opportunity to examine organizational structures of middle school that support student-centered curriculum, including flexible scheduling and teaming. Various models of interdisciplinary, integrated, and exploratory curriculum were explored as well as the role of stakeholders - students, parents, community members, and state government. Teachers continued to mentor pre-service teachers, some providing field sites for participation on
middle school teams. Participants developed an interdisciplinary teaming project for their schools. Ongoing issues and concerns of the action plans were addressed.

**Instruction for the Middle Grades.** The final course examined theory, research, and current practice related to various approaches to grouping of students, instruction, and assessment. Participants addressed such issues as multiple intelligence; learning styles; instructional strategies such as simulations, inquiry, and cooperative learning; tracking vs. heterogeneous grouping; and authentic assessment. Mentor teachers provided field sites for pre-service teachers, and they co-developed and implemented instructional projects in their classrooms.

Throughout all the Strand courses, teachers explored personal beliefs, theory, research, and current practice related to middle level education. Projects were designed to encourage implementation, and teachers were challenged to initiate change in their own buildings. Teachers and pre-service teachers were paired in mentoring relationships across the year.

**Purpose of the Study**

The purpose of this study was to examine teachers' perceptions of the impact on them of Otterbein College's Middle School Institute and Middle School Strand during the 1996-97 year. Further, this study was intended to look at teachers' perceptions of what happened in their schools as a result of their participation in this Strand, and to try to sort out the elements that may have contributed to the outcomes. I hope to add to the educational literature through a discussion of what the teachers revealed about their beliefs concerning middle level education, and the impact this professional development opportunity had on their beliefs and their willingness to act on those beliefs.

I hope this study will challenge school districts to look thoughtfully at the potential of teacher-initiated change resulting from professional development and the possibilities that might arise from working more closely with colleges and universities. I trust that
teacher education institutions will rethink their role in promoting change/reform in K-12 settings by working closely with the practitioners who must identify the problems and initiate the changes. Finally, this study will highlight the importance of listening to and learning from teachers who have been given the opportunity to reflect and apply what they have learned.

Rationale and Significance of the Study

The current status of teacher preparation for the middle school presents the primary rationale for this study and contributes to its significance. The vast majority of teachers in the middle school setting have been prepared for another place - elementary school or high school. They have been prepared at one end or the other of the content continuum, either as generalists with little depth of knowledge in any discipline, or as subject specialists with depth of knowledge in only one area. Preparation for teaching in the middle school has been the "black hole" of teacher education, perhaps because middle schools themselves have been perceived as holding tanks in the K-12 system for students no one can understand who will hopefully just "grow out of it," and for teachers and administrators who, many assume, would probably be happier in the elementary school or high school.

To create a professional development program for teachers already teaching in the middle school is an ambitious task. I inferred from what they told me that they are passionate in their love for teaching, but they frequently feel overwhelmed and frustrated by the challenges of working with young adolescents and by a lack of power to change their schools, much less the system. This study was essential to the formative evaluation of a specific professional development program and what it might offer teachers and their schools.

Co-development of this program with teachers and college faculty adds to the significance of the study, because the program evolved just as the study evolved, with the outcome revealed one day at a time. This study suggests a grounded theory model of professional development that can lead to the empowerment of teachers to not only lend
their voices to discussions of reform in their schools and districts, but to also provide leadership for those changes to occur, and to keep their sights focused on the purpose of our middle schools - the education of young adolescents. The conclusions from this study were drawn from practitioners' voices, their reflections on their experiences in the Middle School Institute and Strand, and their observations and the observations of others of what happened in their schools and in their district. This study is also significant in that it can help other colleges and universities think about establishing collaborative professional development programs that can model for pre-service teachers the role of teachers in initiating change.

Research Questions

The questions posed in this study were generated by both my interests and the reality of the setting and its participants. The research questions focused the inquiry and formed the basis for methodological decisions. As a qualitative researcher, I had to exercise caution so that the initial questions did not blind me to other questions which became more significant as the study unfolded. Therefore, I had to revisit my questions throughout the study, allowing the data to shape them as I went.

My initial questions included: What would the reaction of experienced middle school teachers be to their involvement as co-developers of a professional development program in middle level education? What did middle school teachers want/need to learn? What impact would this professional development program have on the beliefs of middle school teachers concerning young adolescents and the kind of schools appropriate for them? What impact would it have on their schools and their district?

I expected these questions to be expanded in new directions and to become more focused as data were collected and analyzed. Guiding me throughout the study was the need to listen to the reflections of teachers, who were my primary sources of information regarding their perceptions of change and what influenced that change. Their voices were the most reliable source of information regarding their own belief system and what
challenged it or inspired it to change. Particularly of interest were retrospective reflections of Design Team teachers and their administrators after the experience was completed.

Therefore, the research questions that were finally addressed were the ones that arose from the reflections of the teachers themselves, not from the researcher. Whereas I was initially asking questions related to how teachers' beliefs might change, teachers' reflections led me to consider how their beliefs had been clarified and strengthened through learning and the development of a collegial community. This dynamic was the key to teacher-initiated change that was documented throughout the study.

Limitations of the Study

The teachers who chose to participate were self-selected and were, therefore, perhaps more inclined to be receptive to the information and opportunities provided by the Middle School Institute and Strand. Perhaps they were attracted by the offer of free tuition.

In addition, I was a co-developer and co-instructor for the Middle School Institute and Strand. As an insider, I was privy to conversations and informal events that no one else would have had access to, and the personal involvement/commitment I had with the program might have influenced the results. I had to take this into consideration in the design of my methodology.

Finally, we had several identifiable goals for the Middle School Strand participants: to increase their knowledge base about young adolescent development and middle school concept; to reflect on the current status of middle school organization, curriculum, and instruction; to proactively select, plan, and attempt to implement aspects of the middle school concept in their classrooms and schools; and to mentor pre-service teachers attempting to prepare for teaching in the middle school. Assignments and projects were flexible enough to allow for individual interests and specific building needs. Our goals, assignments, and projects were based on the belief that teachers who have opportunities to access information, reflect on practice, and work with one another in a supportive,
collaborative setting, will be motivated to initiate change within their schools. A priori assumptions like these are not a comfortable fit with qualitative research, and I had to be aware of this limitation. I chose to think about these goals as framing the study rather than limiting it.
A literature review to support research on how change occurs at the middle level must include several components. It is essential to establish a theoretical framework for middle level education, based on the realities and variations of early adolescent development and the emerging knowledge about what works for young adolescents. Configuring responsive schools is only part of the scenario, however. The rest is a confusing array of issues and problems that continue to threaten and hamper middle level reform. A closer look at how change takes place in educational settings, as well as factors that encourage or inhibit change, is needed. In Section One, this review of literature will specifically address reform in middle level education; in Section Two, a selective review of literature will set middle level reform in the broader context of educational change. This literature review has informed the design of and the conclusions I draw from this study.

Section One: Reform in Middle Level Education

A middle school is a building that has four walls and the future inside.

- Sign in the principal's office at Western Middle School in Louisville, Kentucky (Lewis, 93)

This profound statement is not an exaggeration. Young adolescents, like all youth, represent our future, and we as a society have been in denial for a long time about the problems that plague our youth, the seriousness of those problems, and our communal responsibility for all of those children. Our quality of life rests in the balance, not just theirs, yet we somehow have convinced ourselves that "someone else" will solve these problems. The middle school reform that has evolved out of the junior high movement can trace its roots back to the beginning of the century, with its contemporary place in education taking shape within the last three decades.
I will present the review of middle level literature in three parts. In Part I, The Adolescent, I will explain how middle school philosophy is grounded in the realities of adolescent development and the social context in which young adolescents find themselves. Implications for our middle schools will also be discussed.

In Part II, Theoretical Framework for Middle School Reform, I will discuss guiding principles of the middle school that have emerged from repeated calls for reform, and I will summarize the essential elements of a true middle school.

In Part III, Issues and Problems of Middle School Reform, I will present complex issues that continue to hamper middle school reform, specifically, the preparation and certification of teachers, the professional development of current practitioners, and the “silent” debate of middle school reform.

Part I: The Adolescent

It has long been recognized that students in the middle grades are unique in developmental characteristics and learning needs (Douglas, 1920; Van Til, Lounsbury, Vars, 1961; Eichhorn, 1966; Alexander, 1968; Van Hoose and Strahan, 1991; et al.). Donald Eichhorn (1966) coined the phrase "transescence" to refer to this stage of development that begins prior to the onset of puberty and extends through the early stages of adolescence, typically ages 10-14. It would be challenging enough to create a school appropriate for young adolescents if they all matured at the same time, but we are well aware that the normal onset of puberty may vary as much as 6-8 years (Lipsitz, 1981), beginning as early as age 8 with breast development in girls (Van Hoose and Strahan, 1991). This impressive variability is not only found in physical development, but also in socio-emotional, cognitive, and sexual development.

Van Hoose and Strahan (1991) summarize some of the significant facts of early adolescent development that are essential information for any middle school educator. Physical Development
- average gain in height of young adolescents (YAs) is from 2 to 4 inches per year:
the average weight gain per year is 8 to 10 pounds; the differences between individuals causes much concern as YAs perceive themselves as too big, too small, too short, too tall, etc.

certain parts of the body develop earlier and more rapidly, making feet, arms, or noses seem to just not fit; bone growth surpasses muscle growth, making the YA vulnerable to fractures and breaks, particularly in contact sports;

the skeletal structure also begins to harden, with the tail bone taking on its final form; in the process, students, sitting in hard wooden desks, wiggle and squiggle their way through classes during this painful, physical transition;

the irregular secretion of large quantities of adrenalin causes "power surges" that make the student squirm and want to move, stretch, or yell; only the most self-disciplined YA can sit quietly at times like this;

the typical YA craves food, yet usually eats a great deal of food lacking in nutritional value;

sweat and sex glands become active and emit odors that can be offensive, making the YA even more self-conscious.

Sexual Development

differences in sexual development pose a great deal of concern and anxiety for YAs, as they perceive themselves as different;

some YAs choose to hide or accentuate their development through dress and behavior depending upon their perceptions of how their appearance is received by those around them;

privacy may become an obsessive concern, while there is an increased interest in other people's development, dirty jokes, etc.

YAs struggle with their sex role identity, uncertain what is normal; same-sex friendships are dominant, while an interest in the opposite sex increases;
- YAs fall prey to images portrayed in the media that lead to misconceptions about sexuality and relationships;

Cognitive Development

- Piagetian theory suggests that mental development occurs in four phases, with the early adolescent period as a time of transition from the "concrete operations" stage to the "formal operations" stage that may begin as early as the eleventh year (I will shortly present research questioning this assumption);

- during formal operations, students can begin to think abstractly, to hypothesize; mastery of conceptual thinking depends upon the stage of formal operations; this has far-reaching implications for curriculum and instruction;

- when presented with mental tasks that are too difficult, YAs tend to dwell on their abilities and their lack of understanding, often making faulty assumptions about their own intelligence; some would rather not tackle a challenging problem than risk failing at it;

- YAs have a resurgence of imagination, and are able to move easily between purposeful thought and fantasy, sometimes developing elaborate dream worlds in their minds;

- new powers of reasoning allow YAs to reflect upon the changes they are experiencing, often dwelling on them, and sometimes fixating on them.

Socio-emotional Development

- identity is the main task of adolescence, and YAs need to develop views of themselves as valuable, able, and responsible people;

- egocentrism creates a belief that the YA is the focal point of any situation, and much behavior is thought to be enacted for an "imaginary audience";

- the adult begins to emerge, side-by-side with the child (McEwin and Thomason, 1989);

- the young adolescent must evolve from parental control to peer domination to self-control;

- there is a need to establish close relationships with adults who are not their parents;

- the need for a positive self-concept and sense of self-efficacy is so important that Toepfer (1978) documented that of 748 students who had been A or B students in elementary
school whose grades fell to C or below in the middle school, over two-thirds of these students never became good students again in high school, regardless of ability level. Even when he considered students with IQs of over 120, only one-third regained their former prowess after negative experiences in the middle grades;

-emotions are deep, but transitory; anger is common, but short-lived;

-though YAs push at the limits, they still need and expect them; limits are a reflection that someone cares;

-those belonging to social groups cling to the security of that group to the point that they yield their own individuality and behave in ways that run counter to the way they actually think and feel to maintain group membership;

-YAs are sensitive to criticism while they can be cruel to others; righteous about an opinion even when incorrect; independent and dependent at the same time; capable of an incredible range of emotions;

-YAs are surprisingly altruistic, generous, kind, concerned with fairness, and willing to participate in community service.

To realize success, the middle school cannot ignore the holistic needs of young adolescents that transcend programs with overbalanced cognitive predominance. The middle school needs to organize a learning environment that takes into account (and may even have to provide for) social and emotional self-clarification and growth as a basis for maximizing cognitive learning during these years. School programs have not traditionally been responsive to the needs of individuals during the emerging adolescent period (Epstein and Toepfer, 1978). If we are to meet our obligation to teach the young adolescent and provide an environment that will allow our students to maximize their potential, we must pursue this task untiringly.

Social Context of the Young Adolescent

As interesting as it is to look directly at the young adolescent, a discussion about middle school reform is premature until we also look at the social context in which the YA
is situated. While everyone is aware that society is changing rapidly, it is difficult to understand the painful reality this presents to young adolescents. 59% of the children born in 1989 will experience life in a single-parent home. In 1985, the traditional family - working father, housewife mother, two or more kids - represented only 7% of our families. The divorce rate of 50% does not reveal that middle schoolers, who already have the burden of an incredible number of developmental tasks to accomplish, are frequently the ones hardest hit by divorce, lacking the innocence of the very young, yet lacking the coping skills of those who have navigated adolescence. Coupled with the existence of tough decisions about life and the reality of less adult supervision, many young adolescents are faced with changing schools, poverty, violent neighborhoods, etc. (Brough, 1990). Adults have not made them safe at home, at school, or in their communities. Resulting rates of drug abuse, teen pregnancy, drop-outs, and suicides are tragic reminders that we have failed our youth.

When June Cleaver said, "Ward, I'm worried about the Beaver," she was not thinking about the Beaver hiding drugs in his room or getting his girlfriend pregnant (Johnston, 1990). An overwhelming amount of problems of a serious, life-changing nature have appeared in the middle school, and it is obvious that we are not prepared to help these young adolescents.

In his extensive study of the social realities of the young adolescent of the 90s, Scales (1991) presents some sobering statistics:
- over the decade of the 90s, more than 65 million children will become young adolescents and pass through our middle schools; there are currently 22,419,000 adolescents between 10 and 15 years of age;
- roughly one-quarter to one-half of all adolescents in the U.S. are at high risk of failing at school, abusing drugs, becoming delinquent, or becoming an adolescent parent;
- for 10 to 14 year olds, as for older adolescents, the two leading causes of death are motor vehicle and other accidents;
- between 1970 and 1981, deaths due to suicide and homicide among young adolescents doubled; young adolescent males have much higher rates than females of both mortality and nonfatal injury;
- by 1988, 33% of boys and 27% of girls had had sexual intercourse by age 15; however, there is evidence of some reversal, and adolescent males reported fewer sexual partners, less frequent intercourse, and twice as much condom use as in 1979;
- the incidence of AIDS in adolescents jumped 43% in 1989 and jumped another 57% by 1991;
- among the 77% of 8th graders who said they have ever used alcohol, more than half reported first use by the sixth grade;
- in 1989, 22,000 youth under 16 were found to be working illegally - the highest total in fifty years;
- the number of children living in poverty has risen from 14% in 1969 to 20% in 1991; roughly 40% of Latino children and 50% of African-American children live in poverty:

On the other hand, we have been able to identify several factors which help to insulate young adolescents from the severe effects of risk. Adolescents who had strong scores on a positive family life, positive school experiences, participation in structured youth activities, and a feeling of belonging to a church or synagogue had six times fewer risk factors in their lives than adolescents who scored poorly in those four asset areas (Scales, 1991).

Developmental Needs of Young Adolescents: Implications for Middle Schools

Out of this research, nine categories of developmental needs of adolescents have been identified that emerge time and again as central components shielding a person from the worst outcomes of even very risk-filled environments, and how schools might be responsive to those developmental needs. The first seven were identified by the Center for Early Adolescence (Lipsitz, 1984), and the eighth and ninth were added by Van Hoose and Strahan (1991):
1. Diversity - variety of teaching styles, methods, and materials; curriculum balanced between core and exploratory courses; flexible scheduling based on nature of the tasks and the maturity of the student

2. Self-exploration and self-definition - integrate students' developing capabilities, interests, and relationships into units in all curricular areas

3. Meaningful participation in their schools and communities - student-initiated study and activities, student councils and committees, school improvement projects, community service

4. Positive social interaction with peers and adults - small-group learning activities and by providing space for small groups of students to informally congregate; advisor-advisee programs, staff participation in activities, informal contact outside of school

5. Physical activity - non-competitive physical education; physical activity encouraged during breaks and lunchtime; opportunities to move around during classes

6. Competence and achievement - emphasizing academics, high-quality instruction, positive expectations of all students, generous (but honest) rewards and praise; opportunities for increased independence and responsibility

7. Structure and clear limits - clearly stated rules and expectations that are generally accepted and understood by students and staff members; student involvement in establishment of rules and consequences; avoid rigid structure and excessive limits because they invite dependency, hostility, withdrawal, and rebellion.

8. Exploring concepts and generating ideas from concrete experiences - students are given opportunities to think about what they already know about a topic and participate in activities that give them concrete experience with the concepts so they can build an understanding of the concept.

9. Opportunities to discuss values and decision-making - Elkind (1986) has suggested that today's early adolescents experience more stress than students have ever experienced before. Students need to learn about decision-making to deal with these problems. They need to see that they can make decisions, consider alternatives, and make judgments. They need to feel that others care about what they do.

Thus, what we know about young adolescents and what we continue to try to understand about them is the basis for the theoretical framework for the true middle school.

Part II: Theoretical Framework for Middle School Reform

From 1970-1990, the number of middle schools, grades 5 or 6 to 8, increased by over 200% (Alexander and McEwin, 1989); there are now over 12,000 middle level schools (Scales and McEwin, 1994). The middle school has become the predominant
organizational pattern (Epstein and McEwin, 1990). At issue, however, is whether such schools will be operated in a manner designed to respond directly to the characteristics and needs of young adolescents (George, Stevenson, Thomason, and Beane, 1992).

**Call for Reform of Middle Level Education**

The fundamental rationale for schooling at the middle level is to foster healthy personal and academic growth and development of students during their early adolescent years (George, Stevenson, Thomason, and Beane, 1992). While the middle school movement has roots to the beginning of the century, much impetus for current reform appeared in the 80s. Lipsitz (1981) fueled the reform effort by pointing out that middle level schooling is the weakest link in the continuum of schooling. From test scores as well as rates of absenteeism, suspension, vandalism, assault, ample evidence can be found that schools are failing to meet the needs of young adolescents. She pointed out that successful schools are ones where people think about the entire environment in which young adolescents thrive or fail to thrive. It is important to create a school community in which students want to learn because they are acknowledged as valuable and changing human beings.

In 1982 (revised in 1995), the National Middle School Association published *This We Believe*, giving voice to hundreds of middle school educators, and reflecting the pioneer work of such middle school educators as Eichhorn, VanTil, Lounsbury, Vars, and many others determined to advocate for the young adolescent lost in the middle. The National Middle School Association defined the true middle school as "the educational response to the needs and characteristics of youngsters during early adolescence and, as such, deals with the full range of intellectual and developmental needs."

NMSA synthesized 12 essential elements of a true middle school from the professional literature on the middle school. Developmentally responsive middle level schools are characterized by:
* Educators committed to young adolescents;
* A shared vision;
* High expectations for all;
* An adult advocate for every student;
* Family and community partnerships;
* A positive school climate.

Therefore, developmentally responsive middle level schools provide:
* Curriculum that is challenging, integrative, and exploratory;
* Varied teaching and learning approaches;
* Assessment and evaluation that promote learning;
* Flexible organizational structures;
* Programs and policies that foster health, wellness, and safety;
* Comprehensive guidance and support services.

In the midst of a flurry of reform documents, the Carnegie Council on Adolescent Development issued its report (*Turning Points*, 1989), stating in no uncertain terms that one of the keys to saving our children is the reform of the middle school. The transformation of education for young adolescents should involve eight essential principles:

1. Large middle grade schools are divided into smaller communities for learning.
2. Middle grade schools transmit a core of common knowledge to all students.
3. Middle grade schools are organized to ensure success for all students.
4. Teachers and principals have the major responsibility and power to transform middle grade schools.
5. Teachers for the middle grades are specifically prepared to teach young adolescents.
6. Schools promote good health; the education and health of young adolescents are inextricably linked.
7. Families are allied with school staff through mutual respect, trust, and communication.
8. Schools and communities are partners in educating young adolescents.
Essential Elements of a True Middle School

These mandates from within and outside of the educational community have given credence to the efforts of many middle school reformers who have worked for decades to bring attention to the needs of the middle level student, and who have provided the needed impetus to turn theory into practice. Specifically, we will look at the six categories of change in the middle school that seem to reflect this transition from traditional junior high to true middle school, which Cawelti (1988) identifies as:

1. Guidance/advisory
2. Transition/articulation
3. Exploratory programs
4. Block time/interdisciplinary teams
5. Core curriculum
6. Appropriate teaching strategies

After an overview of the first four ways in which middle school philosophy has been put into practice, I will closely examine the last two reforms, the move toward integrated curriculum and appropriate teaching strategies, that are key to the ultimate ability of educators to transform the way we "do business" at the middle level.

Guidance/advisory programs. Embedded in every school's philosophy are statements of purpose which call for attention to all aspects of development - intellectual, physical, social, and emotional. All too typically, the statements dealing with social and emotional development are not backed up with specific programs and plans for achieving growth in these areas (James, 1986). That the affective domain can impact every other aspect of our lives should come as no surprise. In James (1986), Mikalachki is quoted as saying, "Cognitive learning cannot take place in a state of affective disorder, and we can no longer assume that the family or some other agency will take responsibility for the student's (total) affective development." Kohlberg (1971), Erikson (1968), Thornburg (1974).
Elkind (1984), Beane (1986), and many others express and support the importance of the social-emotional development of young adolescents (James, 1986).

While the actual shape of an advisory program may differ from building to building, the idea remains constant. Young adolescents need to develop "significant other" adult relationships, with every student feeling that s/he has one adult in the school who really knows him or her. To this end, every certified person in the building - administrators, counselors, librarians and other specialists - is called on to lead an advisory group, so that each group is kept as small as possible. Whatever the structure the groups take, the purpose is to establish a close relationship with those students over an extended period of time (one to three years), and to serve as friend, mentor, coach, tutor, liaison, advocate, cheerleader, or shepherd (Cole, 1992).

Bergmann and Baxter (1983) outline some essential components of a successful advisory program:

* Principals and teachers must possess basic counseling skills, and be trained in human relations skills;
* At least 20 minutes every day must be set aside for advisory, and include both formal and informal guidance activities;
* Inservice training and retreats must be provided for teachers to help them prepare and plan; all should be knowledgeable about early adolescent developmental and health needs;
* The advisory program must be a part of the guidance curriculum with its own scope and sequence, but should permeate the regular curriculum as well;
* Parents must be kept informed of the goals and purposes of advisory (Bergmann and Baxter, 1983).

Lounsbury (1988) affirms the place of the affective in our schools by stating that "our nation's greatest educational problem is not people's 'skill ills,' but 'moral leukemia'
... our greatest deficiency is the realm of behavior that is attitude and value-driven, not information-driven."

**Transition/articulation.** Educators tend to underestimate the anxiety and confusion young adolescents often feel when making the transition from the child-centered elementary school to the more academically-centered middle school. School administrators and teachers can minimize the distress of the unknown by providing a series of transition activities for incoming students and their parents, so all are familiar with the building and the philosophy of the school. Some schools even provide parents with an opportunity to visit classes, while others match up an incoming student with an older buddy for an orientation period. Continued articulation to keep parents informed throughout the student’s time in the school is extremely important, as it is a time when the students themselves are not prone to keep their parents very well informed, and misunderstandings can easily occur between home and school (Cawelti, 1988).

**Exploratory program.** The middle school may be the students’ first and last chance to see if they can create a piece of artwork, play the trombone, spike a volleyball, play the role of someone else, use a computer program, cook a meal, experiment with new designs in industrial technology, converse in another language, complete a community project, or find ways to use their leisure time productively and safely. Young adolescents need the opportunity to explore a wide variety of subjects and abilities, and middle schools generally limit these opportunities to traditional offerings of unified arts or specials, which include home economics, industrial technology, gym, computer, music, and art, etc. (Bergman, 1992). Whether these courses meet the needs and interests of young adolescents is doubtful, for the content is determined and sequenced by adults. Some innovative schools have added exciting programs of mini-courses and intramurals which allow students to play a role in the planning of topics and activities in which they have an interest. Many of these programs utilize parents and community people who bring a diverse talent pool into the
school and expose students to a variety of interests, hobbies, careers, and recreational opportunities.

When programs are not provided in the schools or other social institutions, young adolescents explore randomly, with peer pressure being the common variable for achievement. Status and acceptance may be gained through exploration in socially unacceptable or dangerous encounters (Bergman, 1992). Thus, a comprehensive program of curricular and extracurricular activities for young adolescents may be a positive contribution to the community as well.

When an exploratory component curriculum is based on the needs of the students it serves, it will not be competitive in nature; it will allow students to explore individual talents and ideas, take risks without fear of failure, gather information, look at alternative ways of doing things, and interact with peers in a productive way (Bergman, 1992).

**Block time/interdisciplinary teams.** In most middle schools, students move from room to room five to seven times a day with five to seven different teachers using various textbooks and assorted methodologies. Students thus report to a different "boss" every 50 minutes and must adjust to a different set of expectations and standards. Not only is the content in each course usually disconnected from other disciplines, but opportunities are limited for students to engage in activities that develop upper level thinking skills and problem-solving skills.

Several schools across the country have moved to longer time periods with a variety of flexible schedules. Teachers have reported major differences in presentation and planning and a more active role of students in learning. The flexible schedule allows teachers to use cooperative learning, integrated curriculum, and multiple-intelligence instruction, all innovations that support constructivist and brain-based learning theories. They also have found that the longer blocks of time result in a sense of calm and a decrease in disciplinary infractions (Buckman, King, and Ryan, 1995).
With block schedules it is then possible to assign teachers to interdisciplinary teams that share the same students, providing two benefits - a school-within-a school that allows teachers and students to get to know one another better, and a block of time that the team controls and can adapt to changing needs. Interdisciplinary teams of teachers who are given time to plan instruction can overcome large ranges of individual differences among students while helping them understand complex issues. This helps teachers show the contribution their field makes in aiding student comprehension of important concepts and issues in other subject areas (Cawelti, 1988).

An integrated core curriculum. Nationally, there has been a growing commitment to, and gradual shift toward, a middle school organization that better responds to the needs of young adolescents. However, when the typical middle school adopts middle level characteristics, they usually do so without asking teachers to change in any substantial way what they actually do for the majority of the day. In spite of good things happening in the way of interdisciplinary teams, advisories, intramurals, flexible schedules, and over-all climate in middle level schools, little improvement has occurred in the basic curriculum. There is a near universal tendency for middle level curriculum to focus upon the traditional disciplines. When taught conventionally, too much time is spent on irrelevant information rather than topics of vital concern that do not fit neatly into any discipline (Arnold, 1991). In addition, the pervasive influence of textbooks, obsession with measurement, and state and local curriculum mandates inhibit the development and teaching of a curriculum "rich in meaning," i.e., curriculum worth knowing, one which deals effectively with values, and one which relates to the needs and interests of young adolescents (Arnold, 1991).

While there continue to exist models of interdisciplinary teaming which call for different degrees of curriculum integration, Beane (1992) believes the only appropriate curriculum for young adolescents is one in which their personal concerns can intersect with the social concerns of the larger world. He has changed the question from "What ought to be the curriculum of middle school?" to "Whose curriculum ought it to be?"
Edward Mikel (1990) suggests we need to take "a leap of faith - to turn the floor over to the traditionally disempowered" - the students.

In Beane's model, the integrated curriculum becomes the whole curriculum, with themes, skills, and enduring concepts coming out of early adolescent and social needs. To fully explore these themes, young adolescents need to apply a variety of skills, like reflective thinking, critical ethics, problem-solving, valuing, describing and evaluating personal aspirations and interests, and social action skills.

Permeating the curriculum should be three enduring concepts: (1) democracy, in which all views are heard and the presence of all people is recognized; (2) human dignity, including freedom, equality, caring, justice, and peace; and (3) cultural diversity (Beane, 1992).

Entering "curriculum" territory is risky business because of the strength of tradition and subject area loyalties. It is safer to focus on better ways of transmitting the usual subject matter or the curriculum organization that surrounds it. Translating philosophy into curriculum is a most difficult feat (Beane, 1992), but if we believe that middle schools exist for young adolescents and not the reverse, we must struggle with what kind of curriculum will truly serve them.

A paradigm shift from "schooling" (we know what you need to learn and here it is) to "learning" is necessary. Focusing on learning means we must devise principles of learning from research on brain functioning to guide us in the organization of curriculum and instruction that will enable all children to construct meaning in their own way. It also means that curriculum should evolve from the learner, not the school or the teacher (Hawkins and Graham, 1994).

Having considered possible problems with interdisciplinary curriculum, teachers must then evaluate whether it makes intellectual sense to integrate certain parts of the curriculum (Jacobs, 1989). Intellectual criteria can involve the following:

* Does the curriculum have validity within the disciplines?
The concepts that relate to the theme must also be important within the discipline to be worth time spent, e.g., history of kite-flying is interesting, but how much instructional time should be spent on it?

* Does the curriculum have validity for the disciplines?
If concepts are considered important to two or more subjects, a multi-disciplinary approach may expand the student's understanding of the concept, e.g., the concept of "evidence" and how the nature of evidence differs from discipline to discipline. Empirical evidence is appropriate in science; archival records and eyewitness accounts provide evidence in history, etc. A discussion of more than one perspective may broaden understanding of the concept.

* Does the curriculum have validity beyond the discipline?
Interdisciplinary units usually have a theme or "hub" beyond the discipline as the organizational center. The idea itself may be valuable to think about, providing a "metaconceptual bonus," the whole being greater than the sum of its parts.

* Does the curriculum contribute to broader outcomes?
Students may become more skilled at flexible thinking, examining issues from more than one perspective. New understandings can impact a student's attitude toward knowledge and learning which in turn can contribute to the development of the whole person (Jacobs, 1989).

Is interdisciplinary curriculum worth it? What effect does it have on teaming teachers, teachers who are not on the team, and students? The significant impact of the interdisciplinary curricular structure on the teachers has been noted in several studies. The isolation so characteristic of teachers' school lives decreases within months of teaming, but isolation from other teams and from one's own subject department can occur. Specialist teachers not included on a team mentioned an increased sense of isolation. Teaming seems to enhance teachers' personal sense of professionalism, and a greater sense of camaraderie is an outcome of collaborative planning. "That teaming causes philosophical commitment
is unlikely; that it gives teachers the ability to translate this commitment into action is almost certain" (Lounsbury, 1992). One finding of concern in a recent study shows that, regardless of the number of years of teaming, teachers feel only minimal comfort with it and, therefore, do not fully implement it (Lounsbury, 1992). Does this imply that the idea of interdisciplinary curriculum is suspect, or that the burden of "swimming against the mainstream" is, in fact, more difficult to ignore than we thought? More research is needed to answer such questions.

George and Oldaker (1985) report findings from their study of 100 effective middle schools that 62% of respondents described consistent academic improvement, and an additional 28% supplied results of increased scores on standardized tests (Lounsbury, 1992). Recent studies also show a significant increase in students' bonding to teachers and school in teaming situations, though self-concept and bonding to peers was not affected (Lounsbury, 1992).

Teaming appears to have positive effects on such affective and social outcomes as interracial relationships, student enthusiasm, student perception of support, student attitude toward teachers, interest in subject matter, sense of personal freedom, and self-reliance, improvement in discipline, and a decrease in truancy, tardiness, vandalism, theft, suspensions, and expulsions (Lounsbury, 1992).

A discussion of interdisciplinary teaming and an integrated curriculum cannot be finished without looking again at the needs of our students. First, we have a more diverse group of students than ever before. Our traditional reliance on ability grouping, or tracking, to teach these students has not been supported by research, even though a majority of teachers believes that ability grouping improves the effectiveness of schooling. The studies reviewed suggest that the practice has deleterious effects on teacher expectations and instructional practices (especially for lower-track students), student perceptions of self and others, and academic performance of lower-ability students. Ability
grouping also interferes with opportunities for students to learn from - and learn to accept - peers of different socioeconomic backgrounds, and may perpetuate notions of superior and inferior classes of citizens. The practice is especially antithetical to the goals and objectives of the middle school (Johnston and Markle, 1986). Building respect for diversity should be a prime motivation and consideration in determining the instructional program as well as the governance of the school/classroom and the activities of the middle level school (Maynard, 1986). Heterogeneous teams of students and an integrated curriculum can help to accomplish this.

Second, students have developmental needs that must be met. They have a great need for intimacy, yet we put them in large, impersonal schools. They have a need for increased autonomy, but we offer them a controlled environment of review and rote learning. They have diverse needs, but we ignore their variability and their need for flexibility (Turning Points, 1989). Interdisciplinary teaming allows students and teachers to get to know one another and to be responsive to individual needs. Integrated curriculum allows for students to pursue topics of interest to them and allows them to investigate issues independently within a safe environment.

Third, an integrated curriculum based on personal and social concerns of students about themselves and their world allows them to ask real questions that may well impact their world. The very survival of today's youth in adulthood may well depend on their success in solving the environmental, social, political, and economic problems created by previous generations (Toepfer, 1988). What more important content can there be?

Appropriate teaching strategies. Middle level students often have limited attention spans and are concerned with matters other than academics. A variety of approaches, then, is required to reach all students. Among teaching strategies most frequently mentioned as being appropriate for middle grade students are mastery learning, peer tutoring, inquiry teaching, cooperative learning, independent study, teaching/learning style strategies, team teaching, and computer-assisted instruction (Cawelti, 1988).
My particular interest is in peer tutoring and cooperative learning as significant strategies for teaching middle level learners. Because of the social nature of young adolescents and the importance placed on peers at this age, social learning structures are particularly effective in raising the incidence of active learning, and in providing affective motivation to complete tasks.

Hundreds of lab and field research studies demonstrate that cooperative learning has a number of very positive outcomes: (1) academic gains, especially for minority and low-achievement students; (2) improved race-relations among students in integrated classrooms, and (3) improved social and affective development among all students. There is also evidence that cooperative learning has a positive impact on classroom climate, self-esteem among students, internal locus of control, role-taking abilities, time on task, attendance, acceptance of mainstreamed students, and liking of school and learning. Students in cooperative learning are more active, self-directing, and expressive. Students are often given differentiated roles in groups so that students with different ability levels have relatively equal status within their groups (Kagan, 1994).

Recent studies have promoted cooperative learning as a means of developing thinking and problem-solving skills, minimizing student anxiety and competition by creating a "safe" environment in which to learn from mistakes, and giving students an opportunity to talk aloud, challenge, and defend a point of view.

One study examined the relative effects of cooperative groups versus independent practice, following the initial instructional period of introducing mathematical problem-solving strategies to junior high students, using the Groups of Four model (Meyer and Salee, 1983). Seventh and eighth graders were assigned to two groups, one using cooperative learning, one using independent practice, for a four week period. The results of the test several months later indicated that the students who worked cooperatively were able to remember and apply the problem-solving strategies better than the students from the independent practice classes. These differences may be due to the following: (1) students...
were more willing to tackle a problem longer in the cooperative groups; (2) qualitative verbalization was observed frequently in cooperative groups; and (3) students in cooperative groups were more open to alternative strategies and received more corrective feedback (Duren and Cherrington, 1992).

Peer tutoring results in positive outcomes for both tutees and tutors. A meta-analysis of 65 objective studies suggested that peer tutoring was effective in producing positive academic and social outcomes for both participants. In 87% of the studies, students from classes that included tutoring programs outperformed students from control classes. Student attitudes were more positive in peer tutoring classes. The effects on tutors were impressive, raising achievement significantly and increasing positive attitudes toward the subject matter (Kagan, 1994). This is extremely important in the face of critics of group learning who feel that high-achieving children will be somehow harmed or will be wasting their time if they have to work with lower-achieving children.

Preventing academic failure among low socioeconomic status (SES) and minority group students continues to be an elusive national educational goal (e.g., Shapiro, 1988). Instructional methods like peer tutoring or cooperative learning have been demonstrated to accelerate gains in the academic achievement of students at-risk for academic failure (e.g., Greenwood, Delquadri, and Hall, 1989; Stevens, Slavin, and Farnish, 1991).

Studies show promising evidence that cooperative learning and peer tutoring are effective practices for the middle school classroom. However, research also shows how many complex variables, like motivation and boredom, environmental context, teacher perception, etc., impact the use of any instructional strategy in the classroom. Adolescent development makes this process even more complicated. Perhaps the strength of cooperative learning and peer tutoring is that it allows for individual differences. In classrooms as diverse as those facing today's teachers, that strength becomes a necessity. In addition, it provides social interaction for adolescents at a time when this is one of the
most important things in their lives. Therefore, these strategies not only are a good match
for the social adolescent, but they allow for a variety of abilities and cognitive levels.

If we are to succeed in transforming the middle school, teachers must become
experts at a variety of strategies that will meet the diverse needs of their students.
Cooperative learning and peer tutoring will be among the most important strategies used in
that endeavor.

In summary, the theoretical framework of the middle school must be grounded in
the nature and needs of young adolescents, both developmental needs and social context.
Any of our decisions which ignore what is best for these young people have no validity and
simply continue "business as usual." There is an overwhelming amount of professional
literature and research identifying certain guiding principles which must remain the focus of
middle school reform: our schools must create safe environments where people care about
each other; our time must be spent studying topics of interest to our students and their
larger world, while assuring that they have the general knowledge and skills to think
critically, gather information, make decisions, and problem solve; our schools must be
organized so that this can happen; and our teachers must be knowledgeable about young
adolescents and committed to teaching them in ways they can really learn.

Part III: Issues and Problems Concerning Middle School Reform

The issues and problems that middle school reformers must address and overcome
are myriad, from scheduling problems to personality conflicts on interdisciplinary teams to
apathy; however, I believe reform will not occur without the appropriate preparation and
certification of middle school teachers and the inservicing of practicing teachers who have
not been prepared to teach in the middle school. These issues can potentially derail middle
school reform, and relegate middle school reform to the long list of educational reforms that
have failed. Only if we can put all of the pieces of the puzzle together can our middle
schools and our young adolescents reach their potential.
Preparation and Certification of Teachers for the Middle Level

One of the most serious problems in middle level education is either making the middle school a miniature version of the high school or an upward extension of the elementary school (Swaim and Stefanich, 1996). This problem is compounded by the reality that most teachers now working in these middle schools were prepared as elementary or secondary teachers and have, with varying degrees of success, had to learn on the job. Only a fifth of middle grades teachers undergo any special preparation for teaching at the middle level (Scales & McEwin, 1994). Therefore, middle schools have been primarily staffed, out of necessity, by those whose training and interest lie at other levels. Many teachers currently teaching at the middle level entered the teaching profession with the goal of teaching at the elementary or secondary level and ended up in the middle school. Teachers who choose to teach in the middle school have been frustrated by a scarcity of preparation programs and graduate programs (McEwin, 1984). Some school districts have responded by trying to provide inservice training for teachers, while others have failed to provide any training. Alexander and McEwin (1989) state unequivocally that middle level preparation should no more be consigned to inservice programs than should elementary or secondary preparation.

Results from research examining the beliefs of middle school teachers and principals regarding the importance of specialized middle level preparation have been supportive. A Boyer (1983) study found that teachers felt they had not been prepared for teaching effectively at the middle level and that specialized preparation programs would have been helpful. Similar results are revealed in earlier studies. Stainbrook (1972) found 91% of junior high teachers and 87% of middle school teachers indicated a special curriculum for professional preparation would be helpful for intermediate teachers. In addition, Brown and Howard (1972) found that over 90% of middle level principals believed teachers should be trained in a program different from elementary and high school programs.
According to Alexander and McEwin (1984, 1988, 1989) poorly prepared and uncommitted personnel have long been viewed as an obstacle to the growth of developmentally responsive schools. While there appears to be general agreement about the need for adequate preparation, teachers reporting in an attitudinal survey do not see a need for middle school certification for themselves, but do see a need for principals and counselors to obtain one. Interestingly enough, principals see a need for teachers to obtain a middle school certificate but do not believe that counselors or principals need to possess one. This may be a key reason why reform has been slow. Professionals themselves are not demanding change, except for the "other guy" (Thistle & O'Connor, 1992).

There seems to be a great deal of consensus around the necessary components of a middle level preparation program that are distinctive from either an elementary or secondary program. The suggested professional sequence includes courses covering unique characteristics of young adolescents and the implications for instruction and school organization, effective teaching strategies and specialized methods, guidance, and direct experiences with middle level students. Most preparation programs also require a different configuration of academic specialization than elementary and secondary teachers by requiring two academic teaching areas (McEwin, 1984). Reform literature has reinforced these recommendations, including Turning Points: Preparing American Youth for the 21st Century (Carnegie Council on Adolescent Development, 1989), Caught in the Middle (California State Department of Education, 1987), This We Believe (NMSA, 1992), and Making the Middle Grades Work (Children's Defense Fund, 1988), etc. (Thistle & O'Connor, 1992).

The crux of the argument for specialized preparation for middle level teachers is that young adolescents exhibit specific developmental characteristics that identify this age as a unique developmental period (Tanner, 1971, and Thornburg, 1983, 1980). Educational theorists have long suggested that learners' development should provide the basis for schools' curricular, organizational, and instructional practices (Manning, 1993).
transitional nature of these years suggest that the teachers best suited for this middle level are those who have been prepared to provide the special instruction, guidance, stimulation, and subject matter competence essential to students' success (McEwin & Alexander, 1988).

With powerful evidence that middle schools can better meet the needs of young adolescents, it is clear that those agencies which control teacher preparation and certification must create programs for middle level teachers if the middle school is to fulfill its potential. Surprisingly, those responsible for establishing standards for certification and teacher preparation have not been responsive to middle school reform. As slow as states have been to enact certification reform, teacher education lags even further behind. By 1987, 28 states had instituted middle level certification, a little over half of the states. In 1981-82, 162 (30%) of responding teacher education institutions, and in 1986-87, 168 (33%) of respondents offered programs of middle level teacher preparation. Both the number and percent offering middle level programs are discouraging in view of the rapid growth in the number of middle schools.

Alexander and McEwin (1988) recognize that certification and teacher training cannot be fully separated. Institutions responding to a survey reported that they do not plan to initiate specialized middle level teacher education programs until middle level teacher certification is in effect. Evidently some institutions have taken the position that they will establish programs only if forced to. This discouraging attitude indicates that many teacher educators do not realize the desirability of such programs. Paradoxically, some state departments of education have waited until teacher education institutions have established middle level teacher education programs before initiating corresponding certification requirements.

It is revealing to take a look at the views of middle level teachers and education deans of institutions preparing middle level teachers. Peter Scales (1993) reports that in response to a questionnaire, middle level teachers rated their preparation programs. They gave less than adequate ratings to their preparation in the areas of parent involvement.
interdisciplinary teaching, teacher-based guidance, site-based management, and cultural and language diversity, all valuable components of a good middle school program because they meet developmental needs of young adolescents.

On every aspect of middle level teacher preparation, deans of education evaluated their programs more favorably than the teachers' rating of the same topics. Differences may reflect that teachers and deans were not evaluating the same programs or that teachers were rating programs in retrospect and deans were rating current programs. However, this discrepancy raises the question of how responsive teacher education institutions are to one of the most effective and pervasive school reforms in recent history.

Professional Development for Middle Level Teachers

Even if every teacher education institution began preparing middle level teachers in their pre-service programs today, it would take another decade or longer to have enough prepared middle school teachers in the schools to really make a difference. Therefore, it is essential that practicing teachers who have not been prepared for the middle school, but who are committed to the education of young adolescents, are supported and provided with adequate professional development to enable them to maximize their effectiveness. Establishing ongoing professional development is one way of encouraging the norm of continuous improvement based on reflection and current research.

Little (1982) compared schools which differed in the amount of instructional change occurring within classrooms. She found that teachers' examinations of their instructional practices were promoted by norms of continuous improvement and experimentation.

The norm of continuous improvement is a belief that learning about one's work is never finished. It is every educator's task to refine skills, inquire into practice, and construct craft knowledge while working with peers. The explosion of educational research in the last 15 years has meant that there is much more to know and apply concerning instruction, learning, and leadership in order to become an effective educator (NSDC Standards for Staff Development, 1994).
Another norm which enhances continuous improvement is experimentation - the belief that effective implementation of a new technique takes time and that early trials do not have to be nor will they be perfect. It also supports a belief that new practices should be protected and nurtured rather than evaluated. If these two norms operate in a school, staff members will constantly learn about their work (NSDC Standards for Staff Development, 1994).

Weissglass (1991) proposes a staff development model based on the assumption that education requires personal transformation and improved collegial relationships. It has four components essential to the change process: obtaining information, reflecting and planning, obtaining emotional support, and taking action. The components are not linear; rather, they interact in any order. Change cannot be made without emotional investment, and to ignore this component of change is to inhibit change (Weissglass, 1991).

A fundamental lesson about school reform from the past decade is that far more time is required for staff learning and joint work than is currently available. Staff development days - typically for workshops - and brief meetings before, during, or after the school day are grossly insufficient for the collegial learning essential to successful middle level improvement efforts.

Where might the time be found? Price (1993) suggests that teachers need one day a week for inservice and professional growth. He proposes "academically productive ways" students could spend the equivalent time in school-based extracurricular activities, occasional large classes, course-related projects, and community service.

The three phases of the change process reveal the complexity of change efforts. During the "initiation or readiness" phase, leaders must establish a clear need to improve, address the intellectual and psychological aspects of readiness, and assist in the development of a vision and plan. In the "implementation" phase, plans are put into action to achieve the intended outcomes. As new learning occurs and problems arise, follow-up support is needed such as coaching, support groups, and study groups to help individuals
transfer the new practices to the work setting. During "institutionalization," the new practices are integrated into the school's policies, budgets, and routines. Structures are developed to ensure initiatives are maintained (NSDC Standards for Staff Development, 1994).

School districts have been notorious for "worst case" examples of inadequate and "immunization-type" inservice. With more and more research-based information on how adults learn and how to create positive climates for change, middle schools are going to have to vigorously pursue the inservice education of their teachers in order to maintain and further the reform of middle level education.

The Silent Debate about Middle School Reform

As I thought about the proliferation of middle schools in the United States and the failure of state boards of education and teacher education institutions to provide appropriate training and certification for middle level teachers, I considered the possibility that this "silent debate" over who should shoulder the burden of middle school reform could scuttle the progress made to date. I became curious about what was being published in professional journals other than the Middle School Journal (NMSA) and Schools in the Middle (NASSP) about middle level reform. I chose to do a content analysis of nineteen issues of a professional journal, Phi Delta Kappan, that is widely read by a broad-based constituency of teachers, administrators, and teacher educators to see to what extent the middle school movement is discussed. I examined the titles of 246 articles in the journal between September, 1992, and June, 1994, and found no articles about middle schools. In fact, there were only nine articles, 4% of the total, which had anything to do with teacher preparation of any kind. Teacher education, much less middle level reform, does not appear to be on the minds of the general profession currently, if Kappan is indicative of mainstream professional journals. Interestingly enough, reform of many other kinds is very much in evidence, with 47 articles, 19%. covering a wide variety of types of reform.
It appears that the major audience *Kappan* is trying to reach are teachers and administrators. The very low level of interest in teacher education is discouraging, however, considering the fact that the quality of all of the teachers and administrators who implement reform and who deliver the curriculum, instruction, and assessment may well be dependent on how well prepared they are.

The total lack of visibility of middle school concerns in such a widely read journal suggests that the general profession is not thinking about middle level education or the students it serves. This led me to extend my content analysis to verify whether, in fact, middle level reform is garnering attention among the professionals who will need to maintain its momentum. I extended the content analysis to four refereed journals, two having a broad base of professional readership including teachers, administrators, and teacher educators - *Phi Delta Kappan* and *Educational Leadership* - and two widely read by teacher educators - *Journal of Teacher Education* and *Action in Teacher Education*. I expanded my analysis to three years' worth of journals, January, 1992, to December, 1994.

Based on my initial investigation of twenty-two months of the *Kappan*, my hypothesis was that articles about middle level reform are not being published in these major journals.

I undertook the task of reviewing the titles of all articles published in the four selected journals. While categorizing articles other than middle school articles was not my primary purpose, I was curious about what topics are generating interest in these journals, if not middle school reform. I feared that titles might not provide enough information about an article to categorize it, but there were very few instances when I did not feel comfortable categorizing the article by title. While it is possible that I missed a middle school article using this technique, I am confident that it would not alter my conclusions significantly.

An analysis of the articles reveals some interesting trends. In *Journal of Teacher Education* and *Action in Teacher Education*, half of all articles concern professional issues
such as teacher preparation, professional growth, certification, etc., no surprise considering the readership. *Educational Leadership* contains 29.5% articles dealing with curriculum and instruction, and 17% articles about assessment, while *Kappan* contains 26% articles on various aspects of reform, and curriculum and instruction articles make up 15%. All of these categories represent interests of teachers and administrators.

Of primary concern to this investigation was the presence of only three middle school articles in three years' worth of journals. It is very significant that middle school reform is not being written about in these mainstream journals, for it suggests that some of the main players of reform - teachers, administrators, and teacher educators - are not going to be exposed to current research and literature on middle level education unless they already have a personal interest in middle schools, in which case they probably read the *Middle School Journal* or *Schools in the Middle*. It also suggests that those who are writing prolifically about middle school reform are not publishing in mainstream journals, or it may suggest that their articles are not being accepted. Those who sit on the editorial boards of professional journals have a lot of power. If middle level education is not represented on these boards, it will not be represented in these journals. The total reform movement may be better served if such articles appear in more mainstream professional journals.

Section Two: Literature Review of Educational Change

In this Section, I will summarize and discuss the professional literature concerning educational change that has informed my study and my conclusions. I did not attempt to complete an exhaustive search of just one topic, but rather chose to do a survey of literature on topics which would specifically relate to my study. The literature review will be presented in four parts: Part I, Why Change Has Not Occurred; Part II, Personal and Societal Contexts Influencing Change; Part III, Second Order Change: Developing a Learning Environment; and Part IV, A Model for Educational Change.
Part I: Why Change Has Not Occurred

In spite of an almost hysterical atmosphere around the status of education created by over a decade of reform reports and critical analyses of what schools are supposedly doing wrong and list after list of recommended approaches to the "fixing" of education, few could say that the governance of schools, the ways teachers teach, or the organizational structures of schooling have substantially changed over the last century (Cuban, 1988). There have certainly been unprecedented levels of activity and involvement focused on educational change, but virtually no progress in student learning and satisfaction has occurred (Schmoker and Wilson, 1995). In spite of educators feeling as though they have been battered by reform mandates and change agendas, it is rather astonishing that there could be maintained such long-term stability amid constant change. Cuban (1988) suggests that change is not necessarily improvement, and the judgment of whether a change is an improvement rests in the eye of the beholder. Murphy (1991) concurs with Bruce Joyce that contributing to this pseudo-change are the tacit understandings that rationalize organization inaction. They provide a feeling that meaningful change is taking place while they preserve the status quo and guard the doors to change.

The "border of the permissible" has not been crossed; always the norms and language of the old system have determined the limits of change (Cooper in Lieberman and Miller, 1991). Good intentions have not carried us where we thought we could go. The literature offers up several suggestions as to why reform has failed.

One of the most serious problems related to educational change has been that "top-down" mandated policies do not "trickle down" to students. In fact, past reform efforts have often been blunted at the classroom door (Radnofsky, 1994). Perhaps this is due to the lack of involvement of teachers in reform, thus, a lack of investment. Certainly the voices of classroom teachers appear to be virtually unheard in the creation and evaluation of reform programs (Radnofsky, 1994).
While the Chicago School Reform Act of 1988 speaks of changes, it appears that many public school teachers are choosing to exert their power in a different direction: they choose not to change, often not even to participate in the whole process (Radnofsky, 1994). Radnofsky (1994) goes on to say that many teachers chose to passively continue doing their jobs the same old way. The natural isolation of the job protected them from outside change. Even teachers who participated in the reform movement viewed it as something that should in no way "interfere" with their daily teaching routines. They chose traditional realms of power - their classrooms - over reform-mandated "empowerment." Weissglass (1991) states that this isolation is particularly devastating when addressing controversial issues.

Norms of the status quo oftentimes supersede tentative movement toward change. At one school, discussion was centered on possible actions to be taken during the fall semester. Only one faculty member voiced strong opposition, but it quelled the excitement of the rest of the faculty and nothing was done. Seniority may be perceived as a voice of authority. Faculty empowerment may result in the retention of the status quo, particularly if the faculty is more cautious and less willing to take risks (Williams, 1990; Weissglass, 1991).

The mere appearance of innovation is sometimes sufficient for achieving political success, but political time lines are at variance with the time lines for educational reform and are complicated by vague goals, unrealistic schedules, preoccupation with symbols of reform and shifting priorities (Fullan and Miles, 1992). Where reform has been attempted and has failed, the inflated claims of reformists has led to a wave of disappointment that frequently hardens into an "acid rain of cynicism - the most corrosive of fallout from failed reforms" (Cuban, 1988). Those hardest hit by this cynicism are teachers themselves, who view subsequent attempts at change less and less seriously.

Even success by a small group of teachers within a school does not effectively spread an innovative practice (Joyce, Wolf, and Calhoun, 1993). Nevertheless, the
charisma of the most inspired teachers needs to dominate the environment in which change is being attempted. Where it does, the learning climate can change quite rapidly - far more so than conventional wisdom would predict (Joyce, Murphy, Showers, and Murphy, 1989).

Some reasons suggested for this tendency of teachers to resist change include "defensive routines" that insulate our mental models, i.e., new insights fail to get put into practice because they conflict with deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting. Although people do not always behave congruently with their espoused theories, they do behave congruently with their theories-in-use (Senge, 1990). We consequently develop what Senge calls "skilled incompetence, a marvelous oxymoron used to describe most adult learners, who are highly skillful at protecting themselves from pain and threat posed by learning situations."

Dan Lortie found three dominant characteristics among teachers, all antithetical to personal and professional growth. Conservatism is a preference for the familiar, the comfortable, and the secure; presentism is a tendency to live from day-to-day, with little long-range sense of a personal or professional future: and individualism is a quality of loneliness and isolation, even from colleagues across the hall. All of these characteristics can erode the effectiveness of schools (Barth, 1980). Barth (1991) later makes the dry comment that "God did not create self-contained classrooms, university departments, and isolated schools within a district. We did - because we find working alone safer than and preferable to working together."

Teacher beliefs about their schools and their students also impact how willing they are to invest in change. Murphy (1991) found that many personnel in schools have translated the belief that background is the chief determiner of performance into a belief that they cannot help students become more powerful learners. This belief must change or reform programs will continue to fail. Murphy was surprised to find that many teachers
have great difficulty accepting positive results even when they have personally witnessed improvement in their classrooms.

Barth (1991) presents statistics which suggest that schooling, in many ways, is a subtractive process that forces students to give up their cultures, relinquish their creativity, and demean themselves in order to succeed or merely survive. 85% of kindergarten children are creative but by second grade only 10% are considered so...80% of students entering first grade feel good about themselves; by sixth grade, 20% feel good about themselves; and by high school, only 5%. He suggests that we educators are a major part of the problem rather than merely the helpless victims of cultural circumstances. In spite of these facts, there is contradictory evidence that teachers and administrators take any responsibility for the problem. While 75% of the teachers and administrators polled thought schools in the U.S. were in deep trouble and in need of fundamental change, less than 25% of the same sample felt that their own school was in any serious difficulty.

Change is difficult to achieve. Fullan (1982) points out: "There is no need to dwell on the fact that the vast majority of curriculum development and other educational change adoptions in the 1960s and 70s did not get implemented in practice, even where implementation was desired."

It is possible to identify at least four sources of obstacles to educational change:
1. The culture of schools - Our beliefs about schooling and learning have evolved over the past two centuries, and they will not be easily shaken. For example, many people assume that what students produce on examinations is the only valid evidence of learning. Instructional practices that promote memorization and mastery of discrete skills are based on the belief that test scores are what really matters. Educators wanting to enhance student's thinking or self-esteem, for example, have often had to implement supplementary programs rather than change instructional and assessment practices that work against these beliefs (Weissglass, 1991). New beliefs about teaching and learning are needed, e.g., all children can succeed and should be held to high expectations: team work and individual
effort should be rewarded; learning should be relevant and responsive to the learner at the time it occurs (Brazee and Capelluti, 1995).

2. Personal resistance to change - Meeting the needs of the 21st century will require more than improving textbooks or updating subject matter. It will require that teachers adopt new approaches to students and subjects. Teachers, however, do not easily adapt to new approaches that require giving up old habits and prejudices. Teachers resort to the familiar, particularly when under pressure or feeling insecure (Weissglass, 1991). Any challenge to the status quo results in a fear of losing what they already have, which is occasionally successful, in favor of something unknown which may or may not work better (Brazee and Capelluti, 1995).

3. Lack of awareness of the need for change - Our background (i.e., ethnic, cultural, class, gender) and our educational experience affects our instruction and how we are perceived by our students, sometimes without our awareness (Weissglass, 1991). Our ability to evaluate how well we are doing may be biased by what strategies worked for us in school and may confound our ability to assess what today's students need to succeed.

4. Working conditions of teachers - Professional isolation is an accepted part of teaching, but isolation is particularly devastating when addressing controversial issues (Weissglass, 1991). Without opportunities to observe others and discuss issues, it is unlikely that individual teachers will reach creative conclusions about how problems might be addressed, or if they do, the lack of support may make it impossible for them to sustain these changes.

For restructuring efforts to be successful, there must be personal as well as philosophical changes (Thompson and Thompson, 1992). If learners and teachers in the middle grades are to realize their fullest potential, we must remove lots of "walls" - the psychological barriers that are constructed in traditional education; the isolation of colleagues; and incongruities between adolescent development theory and prevalent instructional practices (Stevenson, 1993).
Our unit of innovation has usually been the individual teacher, the individual classroom, or a new curriculum to be implemented individually by teachers. But the larger environment in which innovation is supposed to occur is neglected, so few innovations stick. Significant changes in the content and process of education require coordinated efforts throughout a school, a school system, and eventually the broader community. One characteristic of an organization that has a very low ability to learn (change) is that people at all levels see themselves as disempowered, so it's an extraordinarily complex organization and very stratified, very fragmented (O'Neil, 1995).

It is clear that change is difficult, and even those who need to change may resist it. However, even if we can get educators at the middle school level to change, lasting reform requires systemic change. Change will not be complete until other stakeholders take responsibility for their part in middle school reform, notably, teacher preparation institutions and state departments of education which certify our teachers.

**Part II: Personal and Societal Contexts Influencing Change**

It may be easy to assume that teacher characteristics and beliefs so strongly protect the status quo that reform attempts do not frequently convince them that there is a real need for change, and this lack of commitment to change makes them very resistant indeed to externally initiated change agendas. However, Fullan and Miles (1992) purport that focusing on "resistance" - variously known as intransigence, entrenchment, fearfulness, reluctance to buy in, complacency, unwillingness to alter behaviors, and failure to recognize the need for change - is usually unproductive. It diverts attention from real problems of implementation and ignores the fact that individuals must normally confront the loss of the old and commit themselves to the new, unlearn old beliefs and behaviors and learn new ones, and move from anxiousness and uncertainty to stabilization and coherence. People need support for such work, not displays of impatience. Many reform initiatives are ill-conceived, and many others are fads. Perhaps the most authentic response to such efforts is resistance.
Personal resistance to change can be expressed through concerns, such as those identified in the research of Hall, Hord, and others, who developed a Concerns-Based Adoption Model (CBAM) that presents typical expressions of concern about innovation and typical behaviors in the implementation of innovations (Hall, Wallace, and Dossett, 1973). Assumptions underlying the CBAM include:

- Change is a process, not an event.
- Change is accomplished by individuals.
- Change is a highly personal experience.
- Change involves developmental growth.
- Change is best understood in operational terms - what it will mean to teachers and their students.

Teachers' responses to change efforts are influenced by their beliefs and perceptions and the informal norms pertaining to how things are done. As individuals progress through various stages of planned change, they alter their ways of thinking and doing (Evans and Chauvin, 1993). Fullan (1985) points out that change at the individual level involves anxiety and uncertainty, developing new skills, practice, feedback and cognitive transformations with respect to "why this new way works better."

While teachers may hold one of the most important keys to effective and substantive educational change, the literature is clear that there are many other factors which inhibit change. For example, schools have been hampered by structural characteristics that make innovation laborious: no time in the workday for collegial inquiry, no structures for democratic decision making, a shortage of information, and the absence of a pervasive staff development system (Joyce and Calhoun, 1995).

Schmoker and Wilson (1995) conclude that implementation of promising practices without an emphasis on short-term, measurable goals and results, regardless of the worthiness of the practice, is just not enough. Initiatives have frequently been so tentative that they have disappeared in the implementation, fueling the cycle of cynicism with
evidence that, once again, inadequate support will be given to them (Joyce, Wolf, and Calhoun, 1993).

Much of the literature suggests that the research we have had has not been utilized, or worse, has been used inappropriately. While there are inspiring accounts of schools choosing to implement research-based methods and then tracking the impact of these methods on student learning, it is clear that this research is relatively ignored in the majority of our schools (Schmoker and Wilson, 1995).

Other research has limitations. For example, Fullan (1985) identifies several limitations of the effective schools research, among them, the fact that specifying the nature of effective classrooms and schools that promote achievement in basic skills is not the same as understanding the complex character of cognitive processes underlying academic work; focusing on any one goal has implications for other domains; focusing on small samples of schools that already are effective diminishes attention on how they became effective; factors operating in a particular context may not be transferable to other settings; and, finally, key variables obviously work, although how they work together is not necessarily clear.

Problems, and their solutions, are much more complex than some research suggests. Educators and others who are trying to find a quick fix may try to implant someone else's solution on top of their problems, without the hard "head and heart" work needed, usually with unsatisfactory results.

Hargreaves (1995) sets the difficulty of educational change in a broader socio-cultural context by highlighting the characteristics of what is called by many a postmodern age or an age of paradox. This postmodern culture is characterized by many contradictions that have direct implications for educators:

- Many parents have given up responsibility for the very things they want schools to do;
- Business often fails to use the skills that it demands schools produce;
- More globalism produces more tribalism - the economic world is transnational, but national education systems encourage national curriculums and oftentimes parochialism.
• More diversity and integration is accompanied by more emphasis on common standards and specialization;
• Stronger orientation to the future creates greater nostalgia for the past - complexity and uncertainty lead us to long for basic skills and singular values.

Clearly, school organizations have not been fertile ground for innovations suggested from either within or without. They are designed to be stable rather than dynamic. In order to change them, we may have to let go of some practices and ideas that have seemed reasonable, even dear, to us. It is sometimes necessary to remember that the chief reason for seeking improvement is that the search itself enlivens the organization for adults and students alike, and improvement is possible and desirable regardless of the current state of the organization (Joyce, Wolf, and Calhoun, 1993).

Deliberately attempting change is a complex, dilemma-ridden, technical, sociopolitical process (Fullan, 1985), and research in the past has too often focused on factors related to change rather than to theories of how change occurs. Fullan and Miles (1992) noted that currently the phrase "knowledge of the change process" is rather glibly used, though few people really know what that means. Barth (1991) captures some of the complexity of this "change process" when he talks about "the idea of living simultaneously in an old place of 45-minute periods while you are jumping to a new one of interdisciplinary units and shared leadership...akin to redesigning a 747 in flight."

Part III: Second Order Change - Developing a Learning Environment

Cuban (1988) expands our thinking about what kind of reform is actually being pursued by differentiating between first and second order changes. First order changes are essentially solutions to quality control problems like improving efficiency and effectiveness, e.g., recruiting better teachers and administrators, selecting better texts, scheduling more efficiently, etc., without disturbing the basic organizational features, the ways adults and children perform their roles. Second order changes are solutions to design problems and seek to alter the fundamental ways in which organizations are put together by
transforming goals, structures, and roles into new ways of solving persistent problems. This may explain why schools have remained fundamentally unchanged after decades of reform.

Comparing two middle schools involved in reform, Polite (1995) reports that School A had adopted the practices of the middle school movement without providing opportunities for individuals to confront the values, beliefs, and attitudes underlying those practices. Thus, their experience with failed second-order change had hardened into a cynicism that was pervasive in the school. They had succeeded at maintaining traditional practices which were more in line with their values and beliefs about what young adolescents really need in school.

The change effort at school B, however, was focused on changing the roles, attitudes, values, and beliefs of staff members in tandem with the planned changes in structure, organization, policy, and practice. They allowed themselves to question and debate, resulting in conflict and tension. It was this discord that provided an opportunity for growth, and they purposefully "walked through the flames." They lived through the pain of establishing new social norms, mourned their losses, grieved their pain, and celebrated each new step (Polite, 1995). Many schools have falsely assumed that they can "borrow" reform from someone else. The evidence indicates clearly that this process of rebirth must happen within each context to truly transform the participants and thus the school.

Just as teachers can bar change from their classroom doors, teachers can hold the key to transformation of the schools. The fact of change renders teachers learners - teachers must learn to learn. But learning from experience is difficult for any learners. Research in cognitive psychology cautions us about the difficulty of learning from experience by suggesting numerous ways of misapprehending experience and thus mislearning from it (Nisbett and Ross, 1980; Richert, in Lieberman and Miller, 1991). To learn from experience, teachers must have time to think about that experience in order to
make sense of it, and they must be supported in their efforts to do so. Unfortunately, there is little support for teacher learning.

Defining teachers as learners, rather than "experts" and authority figures, requires that they be provided the skills and perspectives necessary to membership in a learning community (Johnston, Duvernay, McGill, and Will, 1996). The assumptions behind a learning community include a mental model of education as essentially a social process (Dewey, 1938/63; Vygotsky, 1978; Lieberman and Miller, 1991). Teachers must have opportunities to discuss, think about, try out, and hone new practices, to reflect critically on their practice and fashion new knowledge and beliefs about content, pedagogy, and learners (Sparks and Hirsch, 1997).

Understanding the learning process supports educators attempting to learn to do things better without feeling inadequate or without being blamed for past practices which were, after all, normal ones. They must learn to tolerate the process of learning, rather than blame one another for not being perfect (Murphy, 1991).

The learning of a complex topic involves the interplay of three independent learning mechanisms: (1) accretion - experience, or new knowledge, preserved through associations with existing schemas (Piagetian assimilation); (2) restructuring - creation of new memory structures or the modification of old ones (Piagetian accommodation); (3) "fine tuning" knowledge or procedural schemas about teaching. Conditions of "critical confusion" (Piagetian disequilibrium) are associated with the learning of complex tasks. Complex understandings must be constructed from experience, and because experience can be constructed and reconstructed in many ways, the process is rarely ever finished (Norman and Rumelhart, 1979; Wildman and Niles, 1987).

Concerns, anxiety, and "resistance" are normal in the face of learning, and if the anxiety and frustration are overwhelming, the learner will not be able to resolve the conflict of old assumptions and patterns of thinking (Oja, in Lieberman and Miller, 1991). Teacher concerns exert a powerful influence, therefore, on the implementation of change,
determining the kinds of assistance that teachers find useful. The developmental and interactive nature of those concerns is real and must not be ignored. Movement through the stages of concern cannot be forced, but, with appropriate support and assistance, it can be aided (Hord, Rutherford, Huling-Austin, and Hall, 1987).

Individual learners, i.e., teachers, must be provided an environment which allows and encourages learning. When teachers have an opportunity to study education and how to improve it, they will often "challenge the regularities" (Lieberman and Miller, 1991). Nothing is beyond questioning. An enriching spiral is generated (Joyce, Wolf, and Calhoun, 1993), one that will inevitably impact the entire organization, i.e., school. The term restructuring is then seen as an ongoing process of comparing current practice with what is known and what is valued and moving to make the necessary changes (Lieberman and Miller, 1991).

Organizations learn only through individuals who learn. Individual learning does not guarantee organizational learning, but without it no organizational learning occurs. In learning organizations, people continually expand their capacity to create the results they truly desire, new and expansive patterns of thinking are nurtured, and people are continually learning how to learn together. Everyone shares responsibility for problems generated by a system and shares responsibility for finding solutions (Senge, 1990).

Learning organizations must be adaptive, and they must continually ask two vital questions: Who are we? What is our purpose? Schools create adaptivity by basing decisions on these questions and filtering responses through agreed-upon core values, shifting decision-making authority to the people most influenced, increasing time teachers have to interact collegially with one another (Garmston and Wellman, 1995).

This vision of a "school as a center of inquiry" (Schaefer, 1967) leads faculties to continuously examine and improve teaching and learning, and students to study not only the curriculum but also their capability as learners. In this changed culture, school improvement plans are viewed as hypotheses to be tested, not panaceas:
Hypothesis 1: Restructuring job assignments and schedules to build in time for collective inquiry;

Hypothesis 2: Active democracy and collective inquiry create the structural conditions for school renewal;

Hypothesis 3: Studying the learning environment will increase inquiry into ways of helping students learn better;

Hypothesis 4: Connecting the faculty to the knowledge base on teaching and learning will generate more successful initiatives, providing impetus to move beyond what we know;

Hypothesis 5: Staff development, structured as an inquiry into curriculum and instruction, will provide synergy and result in initiatives that have greater student effects; and

Hypothesis 6: Working in small groups, teachers share responsibility for their own learning and for helping one another, reducing feelings of isolation, stress, and alienation (Joyce and Calhoun, 1995).

In sum, educational change that is meaningful and effective will take more than structural changes (or first order changes). It will take educators looking critically at what has kept education from changing, and recognizing that what is called for is no less than a reorganizing of the way we work and relate to one another. This will require changes in attitudes, roles, and expectations at all levels, among these a redefinition of the teacher as a learner and the school as a center of inquiry. To continue to grow and improve, schools must become "self-renewing." As I conclude this part of the literature review on educational change and change process, I will summarize theory and practice about how this self-renewal might occur.

**Part IV: A Model for Educational Change**

Hargreaves (1995) proposes six principles of school renewal. (1) People cannot be given a purpose, but rather purposes must come from within. "Moving" missions will
work better if they are temporary and approximate and do not require complete consensus. (2) Policy is best established by communities of people, within and across schools. (3) Reculturing must develop or alter relationships between teachers and others in order that collective action and dialogue can take place in a climate of trust and that a common professional language can be developed. (4) Restructuring is necessary because structures shape relationships. Relationships of power must be redistributed, whether through teacher teams, multi-age groups, block scheduling, mini-schools, or interdisciplinary programs. (5) Collaborative cultures turn individual learning into shared learning and help people see problems as things to be solved, not as occasions for blame. (6) In the face of political pressure from diverse groups with single issue interests, schools must adopt positive politics where power is used with other people rather than over them.

The growing convergence of findings and thought about educational change is giving us a grounded set of themes on which we can proceed with some confidence. Several studies have tracked the progress of implementation of these principles of change and self-renewal in school districts across the country, providing a model for educational change which others may find useful. This model is based on the assumption that education requires personal transformation and improved collegial relationships.

First, teachers and administrators need to learn from research and obtain new information (Weisglass, 1991). As they head off into the literature, their chief surprise is that their collective common sense is not a completely reliable guide to what will work. Some popular programs are not achieving their purposes or, worse, are having negative effects, as in the case of magnet schools, site-based school improvement, voucher programs, and the imposition of standards (Joyce, Wolf, and Calhoun, 1993).

In small study groups, teachers and administrators reflect on new learning in light of current practice, keeping as the central criterion for selection of new programs what holds the greatest promise for children. A useful tool to use in processing the mass of
published research is the procedure for determining "effect size" introduced by Glass (Joyce, Wolf, and Calhoun, 1993).

Reading and discussing what is found in the literature can be renewing; it also can lead to uncertainty and conflict. Schools found that the small study groups provided a source of emotional support as teachers worked through feelings that inhibit the construction of new meanings and the development of new approaches (Weissglass, 1991). These opportunities to develop trusting collegial relationships so that they can reflect on their beliefs about education and construct their own understandings of proposed changes have proven to be essential.

Second, instructional councils or leadership teams made up of representatives from the study groups identify strategies with the greatest potential and create the structures for implementation and evaluation (Murphy, 1991; Joyce, Wolf, and Calhoun, 1993). These teams often do not identify curriculum revision or teaching strategies as areas in urgent need of improvement. Most teachers are not yet ready to address issues that would require examination of teaching style or personal fundamental beliefs about education. The most important thing happening is that the faculty and administration begin talking about change (Foster, 1991). This process needs to increase the capacity of those involved to distance themselves from the highly routinized work they do in order to see what's really going on for students and adults in their schools, to see "with new eyes" (Barth, 1991).

Significant processes occur as educators participate in these study groups and leadership teams. The whole concept of collective inquiry and "team learning" starts with dialogue, the capacity of members of a team to suspend assumptions and enter into a genuine "thinking together." When they are productive, discussions converge on a conclusion or course of action. On the other hand, dialogues are diverging; they do not seek agreement, but a richer grasp of complex issues. Dialogue, by this definition, seems to be what is necessary for the transformational shift of mind, or "metanoia," needed for true change to become possible (Senge, 1990).

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Out of this dialogue comes a shared vision and a common identity that motivates people to learn and excel. When people truly share a vision, they are connected by a common aspiration and common caring that provides the focus and energy for learning (Senge, 1990). DuFour (1995) stresses the importance of this shared vision as a catalyst for change. However, this shared vision must bubble up from the process of learning, dialogue and reflection. Rarely do the participants realize what the vision needs to be at the outset. As Foster (1991) reported, teachers in one study deliberately did not begin with a vision. "Had we started trying to describe our vision of what schools should look like, we would most likely have ended up with a vision that differed very little from our existing vision - we would be looking for better ways to do what we were already doing." In an interview with O'Neil (1995), Senge says that nothing will change unless you create a reflective environment and a degree of safety where individuals' beliefs, ways of seeing the world, and ultimately their skills and capabilities change. Individual visions begin to interact creating a field of shared meaning and finally a shared vision. Visioning is a process, not an event. So is change. And it is the vision which must change in order for the system to change (Anderson, 1993).

Third, the implementation phase is the next part of the cycle of study, discussion, reflection. Using an action research format, the process provides for formative evaluation of schoolwide action, promoting more study of the available professional literature and combining that with the new knowledge being generated on-site (Joyce, Wolf, and Calhoun, 1993). Implementation may require intense and on-going training for staff. What is being implemented determines what is appropriate training. Without a thorough grounding in the theory of an innovation, or what Fullan calls "deep understanding," teachers will be unable to use new skills and strategies in any but the most superficial manner (Joyce and Showers, 1988). One of the most common and serious mistakes made by both the administrators and leaders of a change process is to presume that once an innovation has been introduced and initial training has been completed the intended users
will put the innovation into practice. A second serious mistake is to assume that all users of
the implementation will react in similar ways (Hord, Rutherford, Huling-Austin, and Hall,
1987). Murphy (1991) reported in one study that more than 100 hours of training in four
student learning models were provided for staff during the first year of the project. In
addition, a cadre of teachers was trained to provide on-going service and support to their
colleagues. Training requires additional resources, materials, space, and time (Fullan and
Miles, 1992).

Fourth, formative and summative evaluation is essential. Hord, et al. (1987) remind us that not only the effectiveness of the innovation must be assessed, but also how the innovation was implemented must be examined. Problems must be continually identified and "embraced," rather than avoided. Only through immersing ourselves in problems can we come up with creative solutions (Fullan and Miles, 1992). A learning organization can cycle back and forth between efforts to gain normative consensus about what should happen, to plan strategies for getting there, and to carry out decentralized incremental experimentation that harnesses the creativity of all members to the change effort (Louis and Miles, 1990).

This model of change will of necessity result in dramatic changes in the structures and the cultures of schools. These changes will impact traditional roles of both teachers and administrators. Administrators will need to see themselves as transformational leaders (Browder, 1994) with the responsibility of monitoring change and encouraging growth without trying to control and limit it. Teachers will need to see the bigger picture beyond the walls of their classrooms, and see themselves in a more proactive role. The aspect of the educational model just summarized from the literature which is crucial to its success is the spirit of collaboration resulting from sustained conversation. This is consistent with both feminist and cognitive theorists (Gilligan, 1988; Hollingsworth, 1994; Vygotsky, 1978). Participation in cooperative, collegial groups can expand teachers' levels of expertise by supplying a source of intellectual provocation and new ideas and by breaking
the grip of psychological isolation that characterizes the teachers' workplace (Wildman and Niles, 1987). Collaboration implies the parties involved share responsibility and authority for basic policy decision making (Hord, 1986). It takes energy and time (Lieberman, 1986). Regular collaboration focused on well-defined, measurable student performance goals, and frequent monitoring of progress that enables teams to share concrete insights and adjust processes toward better results both can contribute to substantive change (Schmoker and Wilson, 1995).

An important outcome of this change model for teachers can be an increased sense of efficacy or empowerment. A sense of efficacy is at the core of teacher empowerment (Murphy, 1991). Browder (1994) defines empowerment as a general notion that better things happen when people are given more authority over their work than when authority enabling them to deal with critical portions of their work is restricted. A significant issue in the empowerment "struggle" is that of being "permitted to become empowered." Teachers must be viewed as competent, capable individuals (Smith and Wigginton, in Lieberman and Miller, 1991). This view of teachers provides a foundation for new roles in a reflective-thinking, problem-solving community.

In my discussion of the professional literature related to educational change, I have highlighted theoretical assumptions which are informing current research. The emerging model of educational change which seems to hold the most promise is one in which all members of the educational community have a stake and a role in studying existing literature, dialoguing and reflecting on the creative tension between theory and practice, and developing creative solutions to identified problems. This process recognizes the complexity and difficulty of changing from one mental model to another, and participants are aware of the many roadblocks which can sidetrack or sabotage substantive change. One of the clearest messages from the literature is the importance of teachers in promoting or inhibiting change. That message is of primary importance to this study and to middle level reform in general. In Chapter Five, I will make clear the connections between the
literature, the conclusions I drew from my data, and the implications of this study for future research.
CHAPTER 3
METHODOLOGY

Situating Myself Methodologically

I began this study by asking myself what I wanted to know about this professional development program, comprised of the Middle School Institute and Strand. I wanted to know if the participating teachers would perceive that change had occurred as a result of the Strand, either personally or in their schools. What did the teachers perceive to be their role in reforming the middle school? What would be their commitment to such an intense professional development program over an entire year?

The primary research question became: What are teachers' perceptions of the impact of a professional development program on personal beliefs and practices, and to what degree are they willing or able to initiate change in their buildings? The methodological question became: How do I design a study to get the information I need to answer my questions? My goal in this study was to bring these questions together in a purposeful research design.

My instincts led me to believe that qualitative research methods would be much more satisfying for me and infinitely more revealing in terms of the impact of the Strand on its participants than quantitative methods. Attempts to measure outcomes quantitatively were simply not going to reveal what I was seeking, the voices of the teachers themselves describing the impact of the Strand and what subsequently happened in their schools.

As I examined themes of qualitative inquiry (Patton, 1990), I realized some were good fits and some were not. This was not naturalistic inquiry, where I would be studying real-world situations as they unfold naturally. The program structure itself
would present a certain amount of manipulation and control. I could not claim empathic neutrality either. I was deeply involved in the project and knew many of the participants personally. I asked myself if I could effectively study my own project.

Further examination of qualitative themes was more encouraging. My personal knowledge of the school district and the teachers would certainly add to my insight in understanding what was happening during the Strand. Qualitative data would be relatively easy to access, through the reflective writings, journals, and assessments from the teachers. Close contact with teachers would make interviewing quite comfortable. They were eager and willing to talk with me.

Two themes showed particular promise. Qualitative data would allow me to study in depth the perspectives and experiences of the teachers in each middle school, and also to look for common patterns of experience and perspective across all three schools. In other words, building specific school case studies would offer a different view of the data than would the subsequent cross-case analysis. One perspective would inform the other. Second, a holistic perspective would allow me to step back from the individual cases and the cross-case analysis to examine the phenomenon of professional development within the context of this entire experience. Focusing only on discrete data might cause me to miss the big picture, the experience of the entire Strand with all of the complexities of dynamic interaction among participants, schools, pre-service teachers, and college faculty. Would the overall experience be more than the sum of its individual parts, and would this be documentable through participant writings and interviews? Therefore, I determined I had to carry out the study using two lenses - one for close-up viewing of discrete data from individual teachers throughout the year, and one for more distanced viewing of data from selected teachers and administrators to determine if the overall picture of the program confirmed what I was hearing from teachers and or, indeed, revealed more.
As I collected data and proceeded to analyze and reflect on it, the very real challenge of inductive analysis presented itself. Theories about what happened during the duration of this program must be grounded in the direct program experience of the teachers, not derived from the researcher's a priori assumptions about what would happen. Themes or dimensions of analysis must emerge from the revelations of the field, not from the perspectives of the researcher (Patton, 1990). In this regard, I was an outsider. I did not have any control over the outcomes: their personal perspectives or their willingness to implement change within their home schools.

Many different theoretical traditions and orientations have contributed to the methodological variety in qualitative research. Some of those traditions and orientations were important to consider in the shaping of this study. Phenomenological inquiry focuses on the structure and essence of the participants' experience of the phenomenon - in this case a professional development program. Within this tradition, there is no separate (or objective) reality for people, there is only subjective reality which allows persons to make sense of the world and describe it through their senses. What is important to know is what people experience and how they interpret it. While this was helpful in terms of validating the personal data that were collected, there was a methodological concern raised also. If the only way for us to really know what another person experiences is to experience it for ourselves, then the role of researcher as participant/observer is essential (Patton, 1990), and in this study there were limits to the degree to which I could be a participant/observer. As one of the instructors, I was definitely a participant in the Strand, but I had limited opportunities to directly observe the outcomes in the schools. My direct observations were focused on watching the teachers in our class.

Because of my unique position in this study, two focusing elements of heuristic inquiry were helpful, in that the researcher must have personal experience with and intense interest in the phenomenon under study, and others (co-researchers) who are part
of the study must share that intensity of experience. It is the combination of personal experience and intensity from which an understanding of the essence of the experience is drawn (Patton, 1990). For participants, the reality of finally being offered coursework specific to middle level teaching, after no preparation at the undergraduate level and forced reliance on trial and error, seemed to give teachers with a range of experience an intense interest in what we were doing and what the potential benefits might be for them and for their schools.

Heuristics also emphasize connectedness and relationship while phenomenology encourages more detachment in analyzing an experience, thus retaining the essence of the person in experience (Douglas and Moustakas, 1984).

Hermeneutics is a theoretical approach which asks the researcher to identify the conditions under which an act took place or a product was produced that makes it possible to interpret its meanings. Researchers construct reality on the basis of their interpretations of data with the help of participants who provided that data. Since nothing can be interpreted free of some perspective, it is essential to clarify the perspective and context of both the researcher and those researched (Patton, 1990). This research tradition reminded me as researcher that not only did I have to be sensitive to and honest about my own perspectives and how they influenced my study and my interpretation of the findings, but I also needed to be cautious that I was open to the perspectives of the participants in my study, not assuming that I understood what they meant, but listening, observing, and probing until they revealed what they meant.

While these theoretical perspectives informed the design of this study, it was pragmatism that finally determined its structure. The questions this study was attempting to answer were concrete and practical in the real world of professional development for practicing middle school teachers. The perceptions with which the teacher/participants revealed the impact of the Strand on them and their schools will be used to reshape and modify the Strand in future years, making one function of the study formative evaluation.
Another function of the study was to look at teachers' willingness to initiate change in their own classrooms and schools, to participate in their own action research as they attempted to respond to young adolescent needs.

The Research Design and Methods of Data Collection

Data collection for my study began during the Middle School Institute in June, 1996, and continued through November, 1997. Since the data were collected across eighteen months, there was a chronological element to the study which could not be ignored. Teachers' perceptions of the impact of the Institute and Strand seemed to evolve and develop throughout, and it was important not to lose this as I organized the data. Figure One displays the chronological collection of data from the study. In this section I will describe the three phases of the study, including how data were collected and how these data helped to focus and shape the questions that emerged from the study.

The first phase, the Middle School Institute, included twenty-eight teachers from Meadow Park, representing three middle schools. Data for the first phase of the study were collected from reflection papers, Action Plans, informal conversations with teachers, and Design Team meetings. On the first day of the Institute, teachers provided demographic data as well as reflections on these questions: “Why do you teach middle school? Why did you take this course? What changes are needed in the middle school?” Answers to these questions provided an entry-level snapshot of the teachers who were in the study and enabled the researcher to create a profile of participants (See Figures Two and Three).

On the last day, teachers responded to the questions: “What happened this week... to you, to your school 'team'? Do you believe you can make a difference in your school?” Data were analyzed from the first and last days by identifying themes and patterns in each set of data.
<table>
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<th>DATA DESCRIPTION</th>
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<tr>
<td>#2 - June 1996</td>
<td>MSI teachers</td>
<td>Day 5 reflection papers</td>
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<td>#4,5 - October 1996</td>
<td>Strand teachers</td>
<td>Reflection papers</td>
</tr>
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<td>#6 - October 1996</td>
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<td>#7 - November 1996</td>
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<td>Journal</td>
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<td>Journal</td>
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<td>#20 - October 1997</td>
<td>Principal - Mr. R</td>
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<td>#24 - 1996 - 1997</td>
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* Middle School Institute

Figure 1. Timetable for data collection, including the sources and descriptions of data from May 1996 to November 1997.
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<td>Math 8</td>
<td>BA + 30</td>
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<td>Beg. MA</td>
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<td>SBH</td>
<td>MA</td>
<td>7</td>
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<tr>
<td>P7 - V</td>
<td>El/Guidance</td>
<td>LA</td>
<td>MA + 30</td>
<td>9</td>
</tr>
<tr>
<td>P8 - U</td>
<td>Ma 7-12</td>
<td>Math 7/8</td>
<td>MA in process</td>
<td>7</td>
</tr>
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<td>Eng./J 7-12</td>
<td>LA 8</td>
<td>BA + 15</td>
<td>3</td>
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<td>Art 6/7/8</td>
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<tr>
<td>P13 - W</td>
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<td>H/PE 7/8</td>
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</tr>
<tr>
<td>P14 - V</td>
<td>El.</td>
<td>SS</td>
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<td>LA 7</td>
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<td>Art 6/7</td>
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<td>LA 6</td>
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<td>N/A</td>
</tr>
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<td>Math 6</td>
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<tr>
<td>DT 5** - W</td>
<td>His/Eng 7-12</td>
<td>His 8</td>
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</tr>
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<td>T7 - W</td>
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<td>Art 6/7/8</td>
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<td>23</td>
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<td>DT8** - V</td>
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<td>BA</td>
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<td>Sc. 7/8</td>
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<td>El.</td>
<td>SS 6</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

*T1, T2, T3, and T15 did not participate in the Middle School Institute.

** DT4, DT5, and DT8 were teachers on the Design Team.

"P" designation indicates participation in the Middle School Institute.

"T" designation indicates participation in the Middle School Institute and the Strand.

U=Union Middle School
V=Valley Middle School
W=Westgate Middle School

Figure 2. Professional description of the participants in the Middle School Institute and the Middle School Strand, 1996-1997.
<table>
<thead>
<tr>
<th>PROFESSIONAL CHARACTERISTICS</th>
<th>PARTICIPANTS IN M. S. INSTITUTE (28)</th>
<th>PARTICIPANTS IN MSI &amp; STRAND (15) *</th>
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<tbody>
<tr>
<td>HOME SCHOOL</td>
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<td></td>
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<tr>
<td>Valley Middle School</td>
<td>9</td>
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<td>Westgate Middle School</td>
<td>10</td>
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<td>Union Middle School</td>
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<tr>
<td>Life Skills</td>
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<td>1</td>
</tr>
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<td>Language Arts</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Math</td>
<td>6</td>
<td>2</td>
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<td>Science</td>
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<td>Health/PE</td>
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<td>GRADE LEVEL TAUGHT</td>
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<tr>
<td>6th grade</td>
<td>8</td>
<td>7</td>
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</tr>
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<td>More than one grade</td>
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<td>10.9</td>
</tr>
<tr>
<td>1-10</td>
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<td>1</td>
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<td>N/A</td>
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<td>EDUCATIONAL LEVEL</td>
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<tr>
<td>BA +</td>
<td>6</td>
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<tr>
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<td>4</td>
</tr>
<tr>
<td>MA +</td>
<td>11</td>
<td>4</td>
</tr>
</tbody>
</table>

* Four teachers in the Strand did not participate in the Middle School Institute.

Figure 3. Profile of professional characteristics of participants in the Middle School Institute and the Middle School Strand, 1996-97.
A direct comparison of responses was not possible, because the same questions could not be asked at the beginning and the end of the Institute. However, strong themes emerged from the analysis of both sets of data related to the preparation of middle school teachers, openness to new information, refining of beliefs, the importance of a community or supportive “culture” of advocates for young adolescents, and optimism and enthusiasm for change. These themes helped me to expand my initial question about the impact of the Institute on teachers' beliefs and practices to a broader question that included the potential impact on their schools. For the remainder of the study, the primary question motivating the collection of data was: “What impact has the Institute and Strand had on you, your school, and your district?”

During the second phase of the study, data were collected from fifteen teachers who participated in the Strand’s three courses during the academic year 1996-97. Data were collected in the form of reflection papers, journals, observations of and interactions with teachers in class, selected field observations, and Design Team meetings.

With my primary question in mind of determining the impact of this Strand on participants and their schools, I asked the teachers during the Strand a variety of questions to discover what questions would produce the most helpful information. Patton’s (1990) discussion of six kinds of questions helped me create questions that spread a broad net to capture a variety of responses I might miss otherwise. These types of questions include experience/behavior, opinions/values, feelings, knowledge, sensory, and background/demographic questions.

Fall quarter teachers were asked the following questions: “How have your beliefs been influenced or reinforced by this Strand? What aspects of the Strand have had the strongest impact on your development as a teacher? What, if any, changes in teacher conversation, behavior, or program development in your school do you believe have been influenced by the Strand? What factors seem to inhibit or promote change? How do you personally evaluate whether or not change is good for young adolescents?”
Winter quarter I was much more direct and asked these four questions: "What impact has this Strand had on you as an individual? What impact has it had on your school? What impact has it had on your district? About what roadblocks to change have you become aware?"

At the end of spring quarter, teachers were asked the following questions: "What are your perceptions about the degree to which this Strand has had an impact on the following - your beliefs about middle level education, your willingness to act on those beliefs, your knowledge about early adolescent development, your knowledge about middle school concept and philosophy, your classroom, your school and/or staff, and your district."

The variety of questions seemed to encourage teachers to think about the central theme of the Strand's impact in different ways, and I believe that the quality of data was enhanced by encouraging teachers to approach their reflections from different perspectives. It also reduced the possibility of redundancy if teachers were faced with exactly the same questions each quarter. The down side of this approach was that it produced voluminous data and added to the burden of analysis. However, this procedure added to the richness and depth of the data and proved to be worthwhile.

The three Design Team teachers were requested to keep a journal; in addition, one other teacher from each school volunteered to keep a journal. The teachers were asked to respond to the same questions as the other teachers each quarter, but they also were asked to record observations and reflections concerning what was happening in their schools. This dramatically enhanced the quality of data because they could relate "stories" about what was happening in the schools and how they felt about it. While data from the reflection papers were most useful for determining teachers' perceptions about how the Strand was impacting them, journals became increasingly valuable sources for understanding the impact of the Strand on the schools and ultimately the district.
In addition to extensive written data, I did selective observations in the schools. I determined that extended observations were not appropriate for this study other than to verify the implementation of action plans in all three middle schools. It was clear to me that I would have better access to the teachers through the Strand classes.

My teaching partner, however, had been assigned to supervise student teachers in all three middle schools that year. He became one of my key informants because he was in the buildings on a regular basis and was available to teachers for informal chats in the hallways or in the lounge. On several occasions this provided useful information about how teachers were holding up under the stress of initiating change in their schools. At other times, this proximity allowed casual conversations with teachers about the topic of the most recent Strand class.

Exit interviews and follow-up interviews comprised the third phase of the study. The basic purpose of interviewing is to find out what is on someone else's mind, since we cannot observe feelings, thoughts, or intentions. However, the perspectives of an individual are meaningful because they help us to interpret other data more accurately. The challenge to the researcher, then, is to provide a framework within which respondents can freely express their understandings in their own words (Patton, 1990). I believed that interviews would extend and enrich my understandings of what had happened during the Strand.

I had originally intended to interview the three Design Team teachers myself; however, by the end of the year there did not appear to be anything left to talk about that had not been discussed and rehashed in Design Team meetings, informal conversations, or journals. Clearly, a fresh perspective was needed. About a week after this dilemma presented itself, the director of the grant project that had underwritten the teachers' tuition for the Strand asked if he could hold exit interviews with all five of us on the Design Team.
He planned to interview all three teachers together, and I was asked to sit in as a silent observer. This proved to be serendipitous. His questions as a naive outsider with only a superficial understanding of the Institute and the Strand prompted the Design Team to provide rich details of the experience and their perceptions of what had happened during the year to themselves and to their schools and district. It was truly enlightening to listen to them explain to an outsider what the Strand had meant to them. It struck me that they were trying to articulate something I had not inferred from the data; indeed, they were expressing things that were perhaps embedded in the data, but certainly not obvious. The whole experience of the Strand had been greater than the sum of its parts. These teachers had been transformed.

As the project director proceeded to interview my teaching partner and me, I found the same benefit held for those interviews also. As a naive interviewer, he asked probing questions about things he did not understand. While I had been immersed in the Strand for over a year, I had not been forced to articulate my own perceptions about the experience of the Strand to anyone except other participants. In particular, his encouragement to reflect on the various roles that I played in the Strand was quite helpful. This interview by an "outsider" proved to be very useful data. My research was informed by my own interview.

I conducted an informal group interview with the Design Team teachers five months after the conclusion of the Strand as we prepared a presentation for the National Middle School Association's annual conference. Data from this interview along with their oral presentations validated earlier data and introduced the perspective of distance from the event.

I also interviewed the principals of the three middle schools three to five months after the conclusion of the Strand. These interviews allowed me to triangulate the data and added a more objective view of what had happened in the schools as a result of the Strand. Not only were the principals able to recount the impact of the Institute and the
Strand on their schools, but they also reported seeing dramatic changes in the teachers who had participated. Thus, the principals verified what teachers themselves had reported. The principals’ interviews also added to the data the perspective of years of administrative experience that included frustration with the ineffectiveness of professional development and the challenge of getting teachers to embrace change. Once again, the interviews informed my research.

To summarize, the purpose of this study was to capture the perceptions of teachers participating in the Middle School Strand concerning how it impacted them and their schools. Purpose is the controlling element in research design (Patton, 1990), and in order to find out what I wanted to know, I needed to adapt qualitative methodology in such a way as to answer the questions this study raised. Comparing data collected from a variety of sources was the best way to do this, and a combination of written data, interviews, and observational data was used. Ultimately, the analysis of data provided me with the format for presentation of data.

Participant Selection

Patton (1990) writes that there is no perfect sample size in qualitative research; sample size "...depends on what you want to know, the purpose of the inquiry, what's at stake, what will be useful, what will have credibility, and what can be done with available time and resources.” He also states that the sample size may change: indeed, the sample itself may change if it appears during the study that a change in sample will provide richer data.

The number of participants in my study was determined by the number of teachers enrolled in the Middle School Institute and the Middle School Strand. Twenty-eight teachers from three middle schools in Meadow Park enrolled in the Middle School Institute: nine from Union, nine from Valley, and ten from Westgate. From this broader group I collected written data that helped me to frame the questions for this study, and this initial data provided a baseline of sorts that enabled me to see how perspectives
evolved across the year. Three of these teachers, one from each middle school, served on the Design Team throughout the Institute and Strand.

Eleven of these teachers were able to continue with the entire Strand, and they were joined in the first Strand class by four other teachers who also took the entire Strand. This provided fifteen participants for the second phase of the study, four from Union, five from Valley, and six from Westgate. Figures Two and Three display demographic data about participants. The teachers who did not take the Strand remained identified with and continued to meet with the Strand teachers in their schools, and they assisted with the implementation of the action plans.

The three middle school principals were present on the last day of the Institute to hear the presentations of the action plans, and they were active supporters of the implementation of those plans. They did not participate in the Strand, however. I interviewed them three to five months after the conclusion of the Strand.

Data Analysis

Data analysis is the "process of bringing order, structure, and meaning to a mass of collected data" (Marshall and Rossman, 1995). I found the inductive process of finding that order, structure, and meaning was challenging and frustrating, and the "answers" were illusive. By the end of fall quarter, comments from teachers began to alert me to the fact that something more significant was going on here than just teachers taking a series of courses and doing assignments. It was a spirit in the group, a tangible determination, a commitment to change that was not evident in the beginning. I could feel it, but it was hard to put my finger on and difficult to document, but it sensitized me to be on the lookout for whatever it was. It occurred to me that looking too closely might prevent me from seeing the big picture. I realized that this is one of the challenges of qualitative research, i.e., to look at finite details of data without losing the ability to distance oneself from the data to see larger patterns and meaning in the "whole."
As earlier stated, data from the Middle School Institute had been analyzed separately. Data from each quarter of the Strand were also analyzed separately to determine the potential evolution of perceptions by teachers.

I first color-coded each participant’s responses by drawing a line with the appropriate marker the full length of each page of data in the left hand margin. I then proceeded to code the data by noting a theme or category in the margin that seemed to describe the content of a sentence or paragraph. I cut apart these working copies of the data while leaving my originals intact, so that if I hit a deadend, I could start over easily. No matter how small the slip of paper, it still had a splash of color in the margin to identify the teacher who had expressed that thought. I categorized these slips of paper into dozens of piles initially. I then typed up representative quotes under each category. As the quarters progressed, so did my ability to reduce the data into more accurate themes and patterns.

Once each data set had been analyzed, the challenge was to synthesize the data across the year. This final analysis occurred during the third phase of the study following the conclusion of the Strand. This phase consisted of further analysis and synthesis of data already accumulated throughout the year, but also included further collection of data from follow-up interviews with all five members of the Design Team and with the principals of the three middle schools.

With all of the additional data from interviews, I began yet another analysis of data, comparing interview data with data collected throughout the Strand, and then finally synthesizing all of it. I hit a wall during this stage of analysis as the basic categories I had previously used failed to adequately organize the data. It was at this point I determined that I needed to organize and present the data through two lenses: one, a mini-study of what had happened in each school as a result of the action plans, and two, the overall impact of the Institute and Strand on the teachers. Analyzing the data from two...
very different perspectives was much more time-consuming, but it ultimately provided a clearer picture of the outcomes of the study.

Trustworthiness

Terms such as objectivity, reliability, and validity have little meaning to the qualitative researcher. Rather, it is the qualitative researcher's task to show how her research study has been carefully designed to be credible. In this study I used a combination of source triangulation, selective observation, peer de-briefing, member checks, interviews, and collection of data over time to add credibility to my study.

Prolonged engagement with teachers in the Institute and Strand and on the Design Team added to the trustworthiness of this study. Data collection occurred over eighteen months, and triangulation of data was possible through the use of data from teachers, principals, and the researcher during this time, allowing conclusions to be verified in several ways. The use of document analysis, observation, and interviews also contributed to the credibility of the study.

Peer debriefing provided opportunities to reflect on how I was conducting this study. My teaching partner, who shared the “insider” perspective with me, allowed me to use him as a sounding board for what I thought I was seeing and hearing, and he kept me in touch with reality. A graduate student who had recently completed her dissertation research on the middle school was an “outsider” to the Strand but familiar with middle school philosophy and knowledgeable about teachers. Her perspective allowed me to “step outside of” what I was doing to take a larger view of what was happening. She also was willing to analyze some of my data to corroborate themes I had identified. Another friend with excellent editing capabilities and a thoughtful mind, but no experience with middle school, kept my language straightforward and pushed me to explain everything clearly.
I intentionally did not provide transcripts of the interviews to teachers and principals until some time after the interviews. I wanted them to have some distance from the events of the Strand with which to reconsider their own words. While I did not change the original transcripts, the additional reflection was useful to me in understanding the ongoing impact of the Institute and the Strand.

To provide an audit trail for interested readers, I have included a timeline of data collection in Figure One.

To add to the credibility of this study, I am currently in the process of collecting follow-up data from participants to further document what has happened in the schools since the Institute and the Strand. Several Strand alumni have volunteered to be mentors for pre-service teachers in the current Strand, eager to once again be part of the exciting exchange of ideas among advocates of young adolescents.

Ethical Considerations

Any research done with human subjects has the potential to embarrass or put at risk those who participate. Anonymity was provided by using fictitious names for all participants, their schools, and their school district, and confidentiality was assured. No one besides the researcher will have access to original documentation, written or audiotaped.

There was nothing in this study that put anyone at physical risk; however, the design of the Strand had social and political implications for those who chose to take action in their schools. During the Middle School Institute, teachers were asked to devise an action plan for the implementation of some aspect of the middle school concept that might make their schools more responsive to the needs of young adolescents. All three middle school teams chose a potential hot potato for their action plan. One school proposed changing from traditional parent-teacher conferences to student-led conferences; one proposed a series of activities to address a poor school climate, and one proposed changing from same-grade homerooms to cross-grade homerooms. The
proposals were presented to their principals, who agreed to support them, and the teachers had to proceed with a plan to in-service their own staffs and implement their ideas. The potential for negative reaction was real, and teachers did indeed "take heat" for their willingness to rock the boat and question the status quo. We were sensitive to these issues as the Strand progressed and Strand teachers became even more visible in their schools and finally in the district.

Researcher’s Perspective

Considering the design of this study, my perspective and my situation in the study is very important. While I could be systematic in how I collected data and triangulated sources of information, my voice was an important part of this study. As the researcher, I was both a strength and a limitation in this study. I had familiarity with the participants and insider information that helped me explain the context of this study which few other people will have. However, I helped develop this program, and I had a lot of personal interest invested in its outcome. I believe that my role was a benefit to the study, and that my perspectives added to the richness and depth of the study. Finally, it was my intent to give voice to the teachers who experienced the Middle School Institute and the Strand and who had the courage to initiate change in their schools. I believe I have accomplished that.
CHAPTER 4

RESULTS OF STUDY

What if partnerships between colleges and middle schools could...

• Help teachers improve the climate at their schools?
• Support teachers in trying proven teaching methods like active learning and interdisciplinary units?
• Promote positive interactions among students in different grades?
• Advocate the successful use of alternative assessments such as student-led conferences?
• Empower teachers to strive for smaller communities of learners by teaming in all grade levels?
• Facilitate a mentoring environment for undergraduates through their practicing-teacher classmates?
• Foster teacher collegiality among district middle schools?
• Share a vision for the best middle level education possible for all young adolescents?
• Really make a difference?

WE DID MAKE A DIFFERENCE... AND HERE'S OUR STORY.

Introduction to Design Team Presentation
National Middle School Conference
Indianapolis, Indiana - October, 1997
The study was conducted with teachers participating in the first year of a professional development program for middle school teachers at Otterbein College. The twenty-eight teachers were from three middle schools in Meadow Park, a lower to upper middle-class suburb adjacent to a large metropolitan area in Ohio. While called middle schools, these three schools more closely resembled traditional junior highs in structure and program. They included 6th, 7th, and 8th grades, a common middle school configuration, with teaming of teachers only evident in the 6th grade in spite of a one-time push for middle school reform from the district in 1989. More specific information about the characteristics of true middle schools may be found in Chapter Two, and more extensive background information for the study may be found in Chapter One.

From the participating teachers, my teaching partner John and I invited one teacher from each middle school to serve on the Design Team. This team of five teachers and teacher-educators developed a professional development program that included a week-long Middle School Institute and a three-course Middle School Strand. The Design Team met regularly for eighteen months, from the spring of 1996 until October of 1997, and cooperatively planned, implemented, and evaluated the entire program.

Data were collected from teachers and administrators from June, 1996, through December, 1997, in the form of reflection papers, assessments of impact, journals, interviews, and observations.

In this chapter the data will be presented in three sections. Section One looks in depth at the teacher/participants on the first day and the last day of the Middle School Institute in June, 1996. Data from the first day revealed (1) how teachers were prepared for and initiated into middle school teaching, (2) why they chose to remain in the middle schools, and (3) what changes they perceived were needed in the middle schools. This information is necessary for the reader to understand the level of the teachers'
commitment to and knowledge of middle school philosophy prior to their participation in our program.

Data from the last day of the Middle School Institute were organized according to themes of impact on participants, including (1) appreciation of courses for middle school teachers, (2) information gained about middle school concept and young adolescent development, (3) importance of reflection, (4) impact on attitudes and beliefs, (5) building of community/shared vision, and (6) sense of efficacy/willingness to initiate change. Not only did these data document teachers' perceptions of what had happened to them during the Institute, but several of these themes became useful organizers in analyzing the data from teachers and administrators collected during and after the Middle School Strand.

In Section Two the stories will be told of how teachers implemented the Institute action plans in their respective middle schools. I will provide some background of each school, explain the action plan that was developed during the Middle School Institute, describe the process of implementing that action plan and overcoming roadblocks as the Strand progressed and, finally, identify outcomes of the effort and what this has meant for the school.

In Section Three I will summarize data that revealed perceptions of teachers concerning the impact the Institute and the Strand had on them, their schools, and their district. Four strong themes emerged from the data:

* Teachers became learners.
* Teachers were challenged to think in new ways.
* Teachers gained confidence and felt empowered.
* Teachers became willing to initiate change and overcome roadblocks.

The sources of quotes are identified in parentheses at the end of each quote, e.g., (TRP-1, J/96) indicates that the quote is from a teacher reflection paper on day one of
the Middle School Institute in June, 1996. A complete listing of the sources of data referred to in the body of this chapter may be found in Figure One.

Section One: Middle School Institute, June, 1996

In this Section, I will summarize data collected from the twenty-eight participants in the form of reflection papers on both the first day and the last day of the Middle School Institute.

Day One: Introduction to Participants

Reflection papers written by the teachers on the first day of the Institute introduced the participants to me. This information provided a revealing glimpse into (1) their preparation for teaching in the middle school and their initiation to middle school teaching, (2) why they have chosen to remain in the middle school, and (3) what changes they perceived are needed in middle level education. Inferences could then be made concerning their prior knowledge of and philosophy about the middle school concept before they went through the Middle School Institute and the Middle School Strand. This information was essential if I was to look at the impact that the Institute and Strand might have on these teachers and their schools.

Teacher Preparation For and Initiation into Middle School Teaching

None of the teachers in the Middle School Institute or Strand was prepared and certified to teach in the middle school. Not only were these teachers not prepared, but most of the teachers did not intend to teach in the middle school and had very negative impressions of it.

The only opening I could find was teaching 7th grade English in a middle school. Reluctantly I accepted the position and steeled myself. Dealing with uncouth behavior problems, diagramming sentences, and insipid adolescent literature was not something which I really wanted. Fortunately for me, it did not take the 7th graders very long to convert me into a fanatical middle school teacher. (T RP-1, J/96)

Even after my initiation (I don’t acknowledge it as my first year of teaching, it was so awful), my future plans were to move into my “destined” high school position. (T RP-1, J/96)
Only a couple of teachers indicated that they chose to teach in the middle school, based on positive field experiences or student teaching during college. These teachers reported they were "drawn toward" early adolescent students and felt they were "cut out" for middle school teaching.

Two other teachers, despite a lack of preparation, landed by chance in circumstances which turned out to be positive, as members of a team. Their first year experiences in the middle school were quite opposite the experiences of the other participants. Both spoke about the benefits of being able to work with other teachers and to cooperatively plan and implement curriculum. They viewed this as a way to address the needs of the whole child, not just academics. They acknowledged that this was an excellent way to "break into teaching" with great role models and lots of support.

In sum, the primary characteristic of participants that added interest to this study was that none of these teachers had ever been prepared for the middle school, but rather had been prepared for elementary or high school teaching, and few of them had ever taken a middle school course. The Middle School Institute was their introduction to formal middle level professional development.

Several had very negative stereotypes of young adolescents and the middle school setting prior to getting jobs in the middle school. The exceptions were two teachers who had positive field experiences during college that encouraged them to pursue middle school teaching in spite of a lack of preparation.

While teachers unanimously reported that it was the students themselves who "won them over," two teachers also described the positive impact of their placement on "teams" with whom they could collaborate, seek support, and find role models.

For most of the participants, the lack of formal preparation for middle school had subtly convinced them that the middle school was not a desirable place to be. Middle school teaching had not been "validated" as a worthy occupation by higher education, so elementary or high school teaching held higher esteem. In later reflection, I came to
believe that if middle school teaching was not held in high regard, then young adolescents, by default, were not valued either. Interestingly enough, it was these "undervalued" students who eventually won over all of these teachers and convinced them to continue teaching in the middle school.

**Why Teachers Chose to Remain in the Middle School**

Reflection Papers revealed why these teachers have chosen to remain in the middle school: they like young adolescents, and they find middle school teaching personally fulfilling. Many teachers talked with passion and commitment about their affinity for the nature of young adolescents, and described the characteristics that make this age group so fascinating.

*They still feel inadequate and want to be understood.* (T RP-1, J/96)

*The students are a mixture of worldly sophistication and childhood innocence...* (T RP-1, J/96)

*Students are energetic, full of life, expressive...emotionally fragile...imaginative...creative...far less inhibited than high school students...caring...spontaneous...and curious.* (T RP-1, J/96)

Not only did teachers express an appreciation for their students' stage of development, but they found working with these students personally satisfying and fulfilling, and this impacted the way they viewed their role as teachers. They were aware that these young people need positive role models and adults who care about them and make them feel important. They believed they could make a difference in their students' lives. This resulted in a philosophical shift from a role focused exclusively on the teaching of their subjects to a more encompassing role that "allowed" them to care about all aspects of the students' development and how that affected learning.

*When I began working with middle school students, I found that I became much more interested in teaching students than in teaching subject matter. My focus shifted because my students demanded that I pay attention to their needs, educational and otherwise.* (T RP-1, J/96)

In sum, teachers who initially had very negative views of the middle school and young adolescents became "sold" on teaching in the middle school by these same
students for whom they had had so little regard. They discovered that young adolescents can challenge and delight; most of all, they realized that these students needed adults in their lives who cared about them and would pay attention to all of their needs.

For most of these teachers, it was this growing awareness of their students' needs that had resulted in frustration that schools often were not organized to meet those needs. The strength of their feelings about this is apparent as they expressed their perceptions of what needs to change at the middle level to make it a better place for their students.

Changes Needed at the Middle Level

Participants had very specific ideas about changes that they perceived to be needed at the middle level, as evidenced in their first day reflection papers, and they described changes they would like to see regarding (1) teacher preparation and attitudes; (2) administration; (3) families; (4) society; (5) middle school organization and structure; (6) curriculum and instruction; and (7) programs that meet other developmental needs such as physical, social/emotional, and moral. In so doing, they identified many roadblocks to educational change.

Teacher preparation and attitudes. Teachers were adamant that the middle school setting is unique, and that teachers who are going to teach there need preparation that includes knowledge about the developmental characteristics of young adolescents - physical, intellectual, emotional, social, and moral - and awareness of the resulting implications for teaching these young people.

Teachers were discouraged about apathy and the failure of teachers to learn how to better respond to young adolescent behavior. Teachers "complain about behavior" rather than trying to learn to better deal with the behavior. Failure to prepare teachers for middle schools and failure to give them the knowledge they need about young adolescents sets up both students and teachers for an unsatisfactory situation. Teachers who are not knowledgeable about young adolescents find it challenging and frustrating to teach them and to deal with their behaviors.
Administration. Teachers perceived that building administrators either could not or would not initiate effective change, and several mentioned that they hoped participation in this Institute would be an impetus for change in their buildings. While teachers often spoke of administrators as failing to initiate change in their schools, the same teachers seemed to view them as potentially supportive of change if initiated by teachers. As it turned out, this perception on the part of teachers was accurate, and the administrators turned out to be supportive of the teachers in the Strand who began to initiate change in their respective schools. The shift from the stance that "they (the administrators) should initiate change" to the stance that "I/we can initiate change" proved to be one of the most dramatic outcomes of the study.

Families. Teachers perceived a high percentage of families as lacking sufficient knowledge and training to effectively support and deal with this phase of their child's development. It is this age level that tends to be very "high maintenance," and teachers felt that public schools should start providing more parent education, particularly for parents of young adolescents.

Teachers also viewed parents as hesitant to accept change. One teacher explained:

Many parents are hesitant to accept change. They figure they turned out okay, so the way schools used to be run was okay... So, even though educators may feel certain innovations are best for the students, the parents and community must see merit in them too. The best way to inform the public is to get them involved. (TRP-1, J/96)

Teachers see a need for more family involvement in schools, so that parents can become more aware of what their children are experiencing academically and developmentally. Many teachers used the word "involvement" without suggesting exactly how that would occur, though some did suggest parent education training or family nights.

Society. There was a definite feeling of "they" vs. "us" concerning the society at large. Teachers viewed the general public in terms of the roadblocks that were put in the
way of progress and change, citing money and politics as major problems. Also, teachers were critical of the skewed priorities the public seemingly has regarding expenditure of funds. They were disheartened to realize that taxpayers are willing to spend millions of dollars to build sports arenas but defeat school levies on a regular basis because education is not one of their priorities.

Middle school organization and structure. Teachers identified several changes they would like to see occur in the organization and structure of middle schools, including more site-based management. Because each school has "unique assets and needs," decisions on how to best educate the students should be made at each school by staff, students, and parents.

Several teachers proposed changes in building size and class size. For teachers used to overcrowded middle schools with over 1000 students, limiting the student population to "only" 600-700 seemed very desirable. This opinion might have been very different in another context. The desire for smaller classes was expressed, though some teachers just longed to relate to fewer than 150 students a day, as many middle school teachers must if their schools are organized more like high schools than "true" middle schools.

Not only should schools and classes be smaller, but smaller "communities" of teams should be used to keep students from feeling like they are lost in the shuffle. Teachers, too, seemed to desire the teaming structure to facilitate more flexibility of scheduling, provide moral support to colleagues, and enable teachers to integrate the curriculum. One teacher spoke specifically to the importance of flexible scheduling:

*I would change the student schedule. ...How can you take in information, process it, and apply it in just 42 minutes, then do it 7 more times...Students must be given longer periods of time to process information and then act on it to make it their own if we want real "learning" to take place...We could integrate skills and concepts being taught in several disciplines if we had time to plan and possibly more block scheduling...* (T RP-1, J/96)

Another teacher expressed strong feelings about the advantages of teaming:
Collaboration allows us to feel safe, confident, and a part of a whole working together for the common good of all of us. Teaming can provide more flexibility...and moral support. Teaming can make a large school seem smaller, more personal and caring - less threatening. Students feel unity and are not lost in the shuffle. (T RP-1, J/96)

Middle school curriculum and instruction. The suggestions of teachers for changes in middle school curriculum and instruction were far-reaching, and ranged from concerns about exploratory curriculum and technology to concerns about teaching strategies that would teach students to work together and to problem solve.

Recommendations for exploratory curriculum focused on the need of young adolescents to have an outlet for creativity, whether it be writing, drama, music, or art. However, other teachers mentioned the need of young adolescents to explore different languages and cultures rather than to take "mini high school" foreign language classes.

Teachers recognized that young adolescents need to be able to think and problem solve, to be flexible, to accept and work with others as they have opportunities to do in cooperative groups. Being part of a group, they may become "more confident risk takers and feel ownership and responsibility for their learning."

Several teachers perceived a need for more technology at the middle school level; however, they recognized that "having" it was not sufficient if there were no resources to get software or to teach the teachers how to use technology in the classroom.

In addition, there was some disgruntlement with the current state of assessment, and teachers expressed a desire for more authentic assessment, going so far as to suggest doing away with traditional grades and grade levels. As one teacher explained:

*I would like to see our present system replaced by one in which the students' progress through the school system would be based on the mastery of skills with the elimination of grade levels altogether. This system would eliminate failing students and would motivate students to move on.* (T RP-1, J/96)

Programs that promote physical, social/emotional, and moral development.

Teachers were not exclusively interested in changes related to the intellectual development of young adolescents, but also perceived the need for changes to meet other developmental needs.
Teachers' concerns about physical development included structured and unstructured opportunities for physical activity. One teacher said that the Ohio Athletic Association guidelines preclude sixth graders from participating in interscholastic athletic events and she suggested that sixth graders be allowed to play school sports. Another teacher proposed more unstructured athletic opportunities, e.g., basketball hoops and an open play area where students can run and release much of the excess energy middle schoolers possess. She pointed out that it is a difficult transition for sixth graders to go from recesses each day in the elementary school to no recesses at all in the middle school.

Another teacher expressed concern about the snacks and junk food that are offered at lunch. She suggested that more healthy varieties of food be offered instead.

Meeting social/emotional needs such as personal growth and assessment of strengths and weaknesses was also suggested. The middle school years must be the time when students explore various options. It would be appropriate, for example, to organize the school day so that activities, clubs, meetings, etc., could be during school hours so that ALL students could have an opportunity to be involved in areas of interest. This personal and social assessment is "of infinitely more value than the sole accumulation of facts and figures." One teacher characterized this as the need to "humanize" education. As she put it:

> The first element I feel my school needs is to humanize education instead of feeding students through an education factory. Rushing through 40 minute classes and trying to jam in as much curriculum as possible each day is a good way to burn out both the teachers and student. Both groups need to have time set aside to get to know each other and develop mutual understanding and respect. (T RP-1, J/96)

One method suggested for humanizing education and meeting needs other than intellectual was an advisor/advisee program. Some teachers believed that such a program might provide essential support for students who seem to fall through the cracks.

A few teachers also acknowledged the need for the intentional support and nurturing of moral and character development, which they saw as foundational to all learning and essential to the students' assimilation into the community. Some saw this
occurring through mandatory community service. Others viewed this as a responsibility of schools to teach values such as courage, integrity, leadership, curiosity, and concern. One teacher stated that schools should "nurture the character of students and trust that the academic excellence would follow."

In sum, all of these comments reflect one of the primary characteristics of effective middle school teachers, that of caring for the whole child not just his/her intellect. These teachers had a broader picture of themselves than just a teacher of a subject; they viewed themselves as teachers of children and, therefore, saw the necessity of providing programs for students that would enhance their growth in all areas. They clearly expressed perceptions about changes that need to be made in middle level education if middle schools are to be responsive to the needs of young adolescents.

In their reflection papers the first day of the Middle School Institute, teachers were asked to write about their preparation for teaching in the middle school, why they chose to remain middle school teachers, and what changes they perceived needed to be made in middle schools. I asked for this information "up front" because I had a deep regard for what they already knew, for what they already care about. If I was going to try to describe what happened during this year-long journey we made together in the Middle School Strand, it was only right that I let the teachers tell me where they were when they began. They were experienced, informed, wise, insightful, and full of vision for middle level education. They were idealistic, yet discouraged by what they saw shaping the schools in which they teach.

While there was in the teachers' voices a yearning for change, they did not see themselves as change agents. Everyone around them had become a potential roadblock - administrators, parents, the community, politicians, even colleagues. Still they were committed to teaching young adolescents. They appeared to be waiting...waiting for someone to come along and initiate that change. I was terribly inquisitive about what these teachers would experience during the week of the Middle School Institute.

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Day Five: Impact of Middle School Institute on Participants

During the five full days of the Institute, John and I both observed and sensed the energy and excitement that prevailed among the participants. In order to capture the feelings and thoughts of the teachers about the week, we asked them to write a Reflection Paper the last night, responding to the following prompts:

* What happened this week?
* How did it impact you and the teachers from your school?
* How might your experience here impact your schools?

In these reflection papers I was seeking to find out if teachers perceived that they had been changed by this experience in some way.

Several strong themes arose from the data collected in the reflection papers. Some of them revealed the impact of the Institute on individuals, their knowledge, attitudes and beliefs about young adolescents and middle schools. However, the strongest themes related to their becoming part of a larger community of middle level educators and the sense of efficacy and collective power that emanated from the group as the week concluded.

Shared Knowledge Base

We had all participants read two monographs from the National Middle School Association. *This We Believe* (1995) and *Young Adolescent Development and School Practices* (Van Hoose and Strahan, 1991). These provided a source of common language for discussions and a touchstone for reflecting on personal philosophies and beliefs. Other sources of information during the week included nationally known leaders in the middle school movement as well as local teachers who are involved in reform in their own schools.

We invited several middle school students in to talk with teachers about their perspectives of the middle school experience. It seemed to come as a surprise to the teachers that "kids" could be an important source of information about what they need
their middle schools to provide for them. Most participants had never thought about asking them.

This common base of knowledge was extremely important because most of the teachers did not know teachers from the other two middle schools, and some did not even know teachers from their own buildings. The shared readings, presentations, and discussions helped all participants reflect on their personal knowledge and awareness of issues in middle school reform. The principles of middle level education espoused in the readings initiated dialogue and debate as participants felt compelled to agree or disagree with the readings and their colleagues. As the week progressed, teachers became more comfortable stating their beliefs and referring to the literature to back up their point of view. This articulation of personal beliefs and the subsequent discovery that others held similar beliefs became a powerful motivator as the week progressed.

Some teachers indicated that they knew some of the information but needed to be reminded, others declared unabashedly that they were being introduced to ideas and information that they had never heard of or thought about. Whether they had 20 years of experience or were relatively new to the middle school, they were "hungry" for information and could not get enough. "There is so much more I want to know!" was a typical comment. They were chagrined that they did not even know the National Middle School Association headquarters was an incredible source of support and information. They poured over publications from NMSA, choosing resources that they could take back to their schools.

Another source of valuable information was the insight gained from reflections about the teachers' personal experiences as a young adolescent. Teachers suddenly "remembered" events and emotions they had experienced in middle school or junior high. They talked about the adults, some of them teachers, who had impacted their lives negatively or positively at that age. It was not always a pleasant walk back through time.

*In order to meet the needs of these very unique children we need to walk in their shoes, reminisce. Wow, was that enlightening this week, even painful at times. It*
is a very powerful tool to dig deep into your memories, your thoughts on life, how they affect you as a person and professional, and your philosophy of working with others. I have done a lot of soul searching this week and I think I know myself a bit better. It is amazing to realize how much impact my middle years played on who I am today. With that in mind, I realize my role is very important to those I come in contact with. (T-RP-5, J/96)

Refinement of Beliefs and Philosophies about Middle Level Education

The shared knowledge base provided practical information and a theoretical anchor for the Institute that encouraged teachers to reflect on and articulate their beliefs and philosophies about the education of young adolescents. Many teachers said that their beliefs had been reaffirmed, that they had learned something during the Institute that they "had known in their hearts all along." This included the belief that middle school teachers need to know a great deal about the physical, sexual, intellectual, and social/emotional development of their students in order to teach them effectively and deal with their challenging behaviors.

Also evident was the belief that middle school teachers "teach kids, not subjects." and that getting too sidetracked by the content seriously affected the climate of the classroom and the school as well as the students' achievement.

Until now, I think most of us have probably been responding from a 'gut instinct' of what we think is right, or by trial and error... What we have learned in this course, however, has shed some light on certain aspects of the middle school student I didn't understand, and confirmed and provided proof of some aspects I believed from experience to be true. (T-RP-5, J/96)

Armed with knowledge from readings and presentations, teachers became more willing to state their beliefs aloud and to argue their points of view about what a true middle school should be like if it is to meet the needs of young adolescents. As they became more comfortable with what they believed, and expressed those beliefs, they discovered that they were not alone.

Developing a Sense of Community and Shared Vision

In spite of the fact that almost all of the teachers in the Institute were from one district, albeit three different middle schools, teachers did not know one another very well. Opportunities to get together to brainstorm and focus on issues concerning middle
school students were almost non-existent in their schools and in the district, and teachers rarely had a chance to converse at levels deep enough to share beliefs. The lack of shared friendships and communication within and across schools resulted in teachers not knowing what was being done for students and how to best improve it. Several teachers expressed the frustration that the only communication that occurred on a regular basis was negative "lounge talk," usually griping about students or parents.

The revelation that there were others who shared their commitment to young adolescents and beliefs about middle school resulted in an immediate bonding among all the teachers in the Institute and the development of a kinship across buildings, grade levels, and subject areas. They could not stop talking; they talked over lunch, they talked at the end of the day when we wanted them to go home. We could see the light in their eyes and hear the excitement in their voices. They laughed out loud, listened intently to one another, questioned each other's views, and acted in caring ways toward one another.

This bonding led to the awareness of a common vision for middle level education, variously referred to as a common interest, a common belief, or shared vision. It was this gradual articulation of what a middle school "should be" that contributed to the discussions in which the teachers from the same school met and shared the discrepancies they could see between their beliefs about middle school and what was actually happening in their schools. This self-assessment was driven by the final project.

Each school "team" was to develop an Action Plan focused on improving some aspect of their school to make it more responsive to the needs of young adolescents. These discussions were intense, not without argument, but the working toward consensus resulted in every teacher becoming heavily invested in their school's Action Plan by the end of the week. There was positive energy and spirit and determination in each group.

Even though I was on the Design Team and knew the week's schedule, I had no idea it was going to be as powerful as it has been. We went from empathizing with our students, to understanding what they need developmentally, to being inspired by middle school "experts" to seek change for what's best for our students. We became a community of middle level advocates - a far cry from the
competitive, isolated, and slightly resentful so-called colleagues that we were when we walked in the door Monday. (DT-RP-5, J/96)

The sense of community and shared vision was not just developing among teachers from the same school. We had intentionally assigned teachers to small groups throughout the week with teachers from other buildings. This was significant in a district where teachers from one building had little, if any, contact with teachers from another middle school. In fact, the three middle schools were quite competitive, sometimes even jealous or resentful of one another. However, the sense of community that was evident in the Institute crossed buildings. Teachers recognized that they could be a support system for each other as they implemented their action plans and beyond. They began to see themselves as advocates for middle level education in the district as well as in their individual schools. On the last day of the Institute, they suggested and wrote a resolution of commitment to middle level education across the district that they all signed and sent copies of to the Superintendent and to their building principals.

This shared vision for middle level education had a dramatic effect on the way teachers spoke about themselves as middle school teachers. They could hardly contain their enthusiasm and pride in being middle school teachers. They expressed a newfound awareness of what a significant role they can play in the lives of these young people. One teacher put it this way, "The Middle School Institute has made me feel very special because I teach middle school."

Sense of Efficacy and Willingness to Initiate Change

The strongest theme to come out of the data from the reflection papers was the sense of confidence the teachers had gained in just one week. In spite of expressing frustrations and awareness of roadblocks to change in all of their buildings, teachers became more and more convinced during the week that they could make a difference in their schools through the implementation of their action plans. This confidence rose to new heights on Friday afternoon when each school "team" invited their principal to the
Institute and presented their action plans. All three principals enthusiastically responded with commitments of support, much to the surprise and delight of all teachers involved.

Teachers were very aware of what they would be facing when they took their Action Plans back to their respective schools. They also knew that they would have to operate outside their own "comfort zones" in order to encourage other colleagues out of theirs. Teachers spoke of moving forward and enabling change to occur. They promised to provide support and reassurance for each other in order to make a difference within the district, and pledged to make "the middle schools by name into middle schools by heart."

They sensed a collective power to create the kinds of change that they as individuals could not possibly accomplish alone. They said if they all worked behind the closed doors of their classrooms, change would not happen, but as a "team" they could be a catalyst for change.

"Knowing that research supports our philosophies, knowing that others (across the country) are successfully doing what we dream of, and knowing we have a support system" made the teachers feel they were willing to take a chance and be change agents. "It is rather heady stuff to think that a group of teachers can stimulate a whole community to rethink the way they look at schooling." The teachers repeatedly stated that they were empowered and energized to "seize the day."

In spite of the competence and knowledge about middle schools which the teachers brought with them, their reflection papers strongly suggested that they felt they had learned a great deal about the middle school concept and young adolescents. The very act of reflecting on their own middle school experiences as a young adolescent seemed to be a powerful way of centering their focus on the young adolescent as the reason for middle school. All of these seemed preparatory to the outcomes which were talked about most frequently in their papers. The Institute had changed attitudes and reinforced beliefs, had provided a forum for discussion of frustrations and concerns which led to the building of a sense of community and shared vision, and most
importantly, had allowed them to see themselves as potential instruments of change in
their own buildings and possibly in the district.

Section Two: Teachers Implement Action Plans in Their Schools

Based on what I had learned from the analysis of data from the Middle School
Institute, these questions guided my collection of data from succeeding quarters:

* Would the teachers continue to perceive that what they were learning about the
  middle school concept and young adolescent development was redefining and
  reinforcing their beliefs and causing them to examine their schools and their own
  teaching through a different lens?

* Would they actually follow through with the action plans that they had
devolved during the Institute and implement them in their schools?

* How would they respond to the transition from the "summer camp"
  excitement of the Institute to "the work" of a once-a-week class when their own
  teaching responsibilities would weigh heavy on them?

* Would the Strand have any impact on the teachers and their schools beyond
  what had happened during the Institute?

In this Section, I will introduce the three teachers who served on the Design Team
and provide some pertinent background information about them and their respective
middle schools. These teachers became key informants and providers of data through
Design Team meetings, reflection papers, journals, interviews, observations, and informal
conversations across the eighteen months of this study.

I will also describe the process of implementation of the action plans that were
developed during the Middle School Institute and presented to, and enthusiastically
supported by, the principals the last day of the Institute. The implementation of these
action plans impacted the entire 1996-97 school year either directly or indirectly. Data
revealed the process the Institute teachers used to introduce the action plans to their
staffs, roadblocks they encountered, successes they experienced, including outcomes that seemed to "spin off" the original action plans.

The Story of Valley Middle School's Action Plan

Valley Middle School has a rather traditional staff; the majority are veteran teachers who have been teaching at Valley since its opening in 1969. Its student population of over 900 ranges from low-income to upper-middle class, with most of the student body coming from the older section of Meadow Park (as opposed to newer, upscale housing developments). Parent involvement has been average. The administrators had been classroom teachers earlier in their careers, but have been in administration for many years.

I invited Kris to join the Design Team based on recommendations from other teachers and an observation of her teaching. Coming from a rural community in eastern Ohio where she taught for one year, Kris felt Meadow Park was on the cutting edge of trends in education about ten years ago. She was placed on a sixth grade teaching team and taught math and science. Teachers were encouraged by administration to integrate subject matter and had flexibility with regards to scheduling. During the first five years of teaming, they utilized team time by discussing students regularly and occasionally planning an interdisciplinary unit. Student population increased, building morale seemed to be getting lower, and Kris did not feel they were on the "cutting edge" any more. Throughout the next few years teachers became more concerned with the state proficiency tests and less concerned with making their school a positive place to teach and learn.

Having finished her Masters Degree at Otterbein College a few years before, she was ready for a new challenge and was excited to become involved in the Design Team for a middle school professional development program. Following my presentation about the Middle School Institute to the entire staff, nine Valley teachers decided to attend.
There were several opportunities during the week of the Institute for the Valley teachers to work on the design of their action plan for Valley Middle School. After much intense discussion of needs at the school and roadblocks that the teachers recognized could potentially prevent change from occurring, the team determined that their primary mission was to enhance school climate through three school-wide goals:

- Cross-grade level homerooms in which 6th, 7th, and 8th graders would be mixed. The team hoped this would enhance relationships among students of different grade levels and would be a start to a possible advisor/advisee program;
- Teacher social committee that would plan staff activities such as a bi-weekly staff breakfast to encourage more friendly interaction among staff;
- Evaluation and revision of other existing programs.

To the team's surprise, not only did their principal and assistant principal respond positively at the Friday presentation, but both enthusiastically supported initiating the ideas for the coming school year. Summer meetings were held to further discuss and revise the action plan with input from the school counselors. Institute teachers worried about the reaction of the rest of the staff.

At the staff meeting prior to the beginning of the school year, Institute teachers shared what they had experienced at the Institute, especially the comfort they felt in being able to collaborate with staff in their own building as well as other middle schools in the district. After they shared information from NMSA's *This We Believe* (1995), a staff member requested that all teachers have an opportunity to read the publication. By the next staff meeting, the principal had purchased a copy for each teacher.

The Institute teachers led the discussion about cross-grade-level homerooms, summarizing research showing that fostering relationships between younger and older students can be beneficial to school climate with fewer hallway problems, etc. While there were questions about the rest of the staff not being involved in the decision, the majority of teachers were receptive. Administrators assured the staff that if they did not
like the arrangement, homerooms could be switched back to traditional configuration at semester break.

At subsequent staff meetings, the Institute teachers promoted discussions about the characteristics of young adolescents and the staff revisited the school mission statement after having read *This We Believe* (1995). Volunteers began plans for the staff Breakfast Club and committees already in place began looking at existing school programs.

Reports from students and parents about cross-grade-level homerooms were positive. According to administrators and counselors, it appeared that there were fewer hallway confrontations between grade levels, fewer discipline referrals for hallway behaviors, and fewer 6th grade parents complaining of their students being "picked on" by upperclassmen. Teachers observed that the sixth graders seemed more at ease and seventh and eighth graders seemed to like their young "fan clubs." At the urging of several teachers, the Institute teachers, several of whom were continuing in the Middle School Strand, began developing ideas for interpersonal and get-acquainted activities during homeroom time. The flexible nature of the projects for the Strand allowed teachers to get credit in class for the projects they were developing in the schools.

Finally, those who were not really in favor of this whole idea began complaining. "Isn't this another lesson preparation?... I don't want to take on guidance responsibilities." The Strand teachers welcomed the feedback, even though they felt a little defeated. In January, a disgruntled staff member spoke up and said there was no point in doing a homeroom activity if they "already knew they didn't like it." and suggested that the homerooms be switched back to traditional grade level configuration at semester break the next week. Kris's ongoing presence as the unofficial "leader" of the Strand teachers in her building had given her much confidence in what they were doing, and instead of backing down, she suggested a staff and student survey as the best way to gauge how everyone was feeling about the cross-grade level homerooms. The survey results were
overwhelmingly positive from staff and students. The resistors were silenced, and plans proceeded for homeroom activities.

Other goals were successfully being pursued as well. (1) The staff breakfasts had been a big hit and provided a needed social time for teachers to enjoy each other's company. (2) Committees looking for ways to recognize positive behavior and achievement instituted new programs. (3) Seventh grade teachers who had never had the opportunity to team began talking about the possibilities of teaming. (4) Kris's 6th grade team (three out of four were involved in the Strand) successfully "pioneered" student-led conferencing with information from the Strand classes and support from fellow teachers in the Strand. This replaced traditional parent-teacher conferences for the students on their team. (5) Homeroom activities were finally carried out. (6) A whole school field day that had not been held for several years took place.

Kris believes that change is more likely to happen when promoted by a fellow teacher than by an administrator. By reading current research and being exposed to the concept of teacher-initiated reform through the Strand, she feels it was easier to advocate for change in her school through the collective strength and enthusiasm of the teachers who were involved in the Strand. She claims the shared vision of the Strand teachers has affected the entire staff, and that she is back on that "cutting edge." In conclusion, Kris said:

*I can't give enough credit to the Middle School Strand for emphasizing the importance of middle level education. The Strand has enabled us as a district to make a stand for middle level education. With the support system of experts in the field and the camaraderie of each other, we have made a difference in the education as well as the lives of young adolescents attending our schools.*

(DT-NMSA, O/97)

The Story of Union Middle School's Action Plan

Union Middle School has a unique staff in that teachers from the other two middle schools were brought together when it opened eight years ago. The student population of over 1000 comes from all economic levels. The majority of the students are bussed to school. There is good parent involvement and an active PTSA with parents serving on
many of the school's committees. Union is also a Venture Capital school, and thus has the financial resources to tackle many projects. The administrators are viewed as experienced and supportive of what goes on at Union.

I invited Nealy, a 6th grade math teacher, to be on the Design Team because of my personal knowledge of her competence as a teacher and her propensity toward leadership. She came to Union after teaching fifteen years in another middle school in the same district. She felt the need for change, and jumped at the opportunity to change grade levels and become part of a five-member team, where she has remained for four years. She has found there to be a real sense of pride and commitment in the school because the staff has a sense of ownership of the building. She has also found the staff to be risk-takers, not afraid of change.

I was asked to talk with interested teachers about the Middle School Institute, and ten teachers decided to attend. During the week of the Institute there was much interaction with teachers from the other middle schools as well as time for the Union teachers to discuss possible directions for their action plan. They looked at their school's strengths and weaknesses by reviewing the twelve characteristics of a developmentally responsive middle school summarized in *This We Believe* (1995). They felt they were doing a pretty good job already in most areas, but their new awareness of a shared vision for the improvement of middle level education led to a commitment to "make good better!" Their action plan focused on changing traditional parent-teacher conferences to student-led conferences, an idea they believed would benefit their students.

In order for this transformation to take place, teachers would have to come out of their "comfort zones." The Institute teachers believed their colleagues might take that risk because they are dedicated to teaching young adolescents rather than just their particular subject areas. They anticipated the strongest support coming from the 6th grade teachers, the only teachers in the school functioning on teams.
When the Institute teachers presented their action plan to their principal on the last day of the Institute, he responded positively and promised his support and assistance in making this a school-wide program. He met with the Institute teachers several times throughout the summer to prepare strategies for "marketing" their plan to the rest of the staff.

The action plan was presented at the first staff meeting, with Institute teachers explaining student-led conferencing and providing the rationale that they could give students more ownership of their education and empower students to take charge of their learning and their lives. The teachers gently suggested that their colleagues open their minds to this new idea, think about it, and be willing to discuss it.

At the next staff meeting, the Institute teachers provided more information and presentations of students modeling what they wanted to have happen during student-led conferences. They then surveyed the staff to get their feelings and input. Nealy reported, "It was not a rushed process, although we felt we were under a time line: we did not want to push our plan on teachers...we wanted them to buy into the plan, to share our common vision."

The survey shocked the Institute teachers. While 95% of the staff had agreed to try student-led conferences, the biggest resistors were the other 6th grade teams, the very ones they had assumed would be their strongest allies.

Next came intensive in-servicing of the teachers so they would be able to coach their students through this process. Students became enthusiastic about the idea of presenting their own work and achievement to their parents. The idea was presented to parents through PTSA meetings, newsletters, Open House, flyers, and through the students writing to their parents to invite them to the conferences. Secretaries, custodians, counselors all had to be in-serviced so they would understand what was going to happen and could adjust their roles accordingly.
The results were overwhelming. For the first time in the school's history, over 90% of the parents actually appeared for conferences to listen "in amazement" as their own son or daughter carefully and confidently explained to them what they had done during the first nine weeks' grading period, what they had learned, what they still needed to work on, what homework they had failed to do, and what their goals were for the next nine weeks. Four or five student-parent groups were usually meeting in a classroom at one time, with the teacher greeting everyone and circulating among the groups to answer questions or address concerns. Teachers reported that it was the most positive interaction with parents they had ever encountered, and the administrators reported that they had never had so many compliments from parents or so few complaints about conferences. Instead of a relatively negative atmosphere that frequently results from teacher-parent "confrontations," all participants seemed to have a much better grasp of what the students had or had not done. Students felt competent; parents saw their children in a whole new light; teachers felt like professionals.

One year later, 100% of the staff of Union Middle School voted to continue student-led conferences. Nealy commented, "Throughout the planning and implementation of our action plan, the Middle School Strand supported us. It kept us going as a team, kept us on top of research in this area, and constantly reminded us of our vision."

The Story of Westgate Middle School's Action Plan

Westgate was the first school in Meadow Park built specifically as a junior high in the early 60s for grades seven, eight, and nine. It has a veteran staff, many of whom have 20-plus years teaching experience, and it serves a population of over 1100 lower to upper-middle class students. Because of overcrowding in all three middle schools, 200 of their students are shuttled in from other middle schools. There is an active PTSA, with volunteers logging over 1000 hours yearly. Administrators have many years of experience.
I invited Laura, an 8th grade social studies teacher, to be a member of the Design Team because of my personal knowledge of her competence and her outgoing and positive personality. She is a product of Meadow Park Schools and attended Westgate as a student. Certified in secondary history and English, she has taught social studies at Westgate for ten years. She used to think of middle school as a stepping stone to high school, but she loved it and chose to stay. She always thought of middle school as "special" but "could never articulate how until she was involved in the Middle School Strand at Otterbein."

I was asked to speak to the Building Council about the Middle School Institute. Ten teachers decided to attend the Institute. During the week, they became so enthusiastic about middle school programming that they were eager to bring the principles of This We Believe (1995) into reality at Westgate when put to the task of developing a school-wide action plan. They determined through intensive discussions that their biggest roadblock was school climate, and that became the first of three goals:

- Create a more positive school climate for students and teachers;
- Develop an advocacy plan for young adolescents;
- Begin a conversation about implementing teaming in 7th and 8th grades (only 6th grade teachers were on teams).

With the enthusiastic response of their building principal to their presentation of the action plan on the final day of the Institute, the teachers conferred throughout the summer. Although they were a group of ten, they feared telling the rest of the 75+ Westgate staff about their mission to improve school climate, mainly because of very strong negative voices that often cut down ideas before they ever got off the ground. They decided rather than "presenting" their plan, they would engage the staff in small group discussions of the same issues they had wrestled with in the Institute, and let them draw their own conclusions about what their school needed, with an Institute teacher facilitating discussion in each small group. The end of that first staff session was upbeat.
with Institute teachers serving ice cream, and there was a sense of cohesiveness among
the staff that had not been sensed for some time. A T-shirt was suggested for the staff,
and the suggestion of a usual "naysayer" gave birth to the acronym W.O.W. for Wild On
Westgate. Laura reported with relief that the "road seemed less rocky."

The staff, with the leadership of the Institute teachers, identified three areas
lacking that contributed to a poor school climate, and solutions were pursued for each:

1)  Problem: Need cohesiveness and school unity
    Solution: Spirit Day - a single day event where grades would be mixed and
    students and teachers could have fun in a wide array of activities indoors and
    outside;

2)  Problem: Need positive interaction with parents
    Solution: Greater PTSA involvement and communication, with at least two
    teachers at every meeting;

3)  Problem: Need student sense of ownership and involvement
    Solution: Wolf Pack Council - reinstituted a defunct Student Council; students
    had their voice back.

Plans toward meeting all three goals went forward without any serious
roadblocks. Students were enthusiastic about the Wolf Pack Council and initiated their
own solutions to building a more positive school climate. Teachers' increased presence at
PTSA meetings encouraged communication between parents and teachers.

Many teachers and parents became actively involved in planning for Spirit Day,
led by the Institute teachers. It proved to be a unique event in the history of the school,
with over 1000 students and teachers participating in both fun and educational small-
group activities that encouraged informal, positive interactions between the staff and the
student body. Teachers reported a feeling of excitement and unity that they had not felt
for a long time. One teacher who was not in the Institute shared with me, "This would
never have happened without your Institute people."
The Institute group remained informal, fluid, and loosely cohesive, a strength because it was inviting to others. They continued to meet to try to expand climate improvement efforts, however, there was trouble brewing by March. Resentments were building between 7th and 8th grade teachers who were not on teams and 6th grade teachers who were on teams. Being on teams was perceived to be a benefit, e.g., having teachers to work with, sharing the same students, and not having a "duty" period.

As frequently happened during the year of the Strand, teachers from Westgate brought their frustrations to class and brainstormed with colleagues sympathetic to their problem. Seventh and eighth grade teachers throughout the district were frustrated that the district had never implemented teaming at the 7th and 8th grades, in spite of district promises to do so. The Westgate teachers proposed to John and me that their winter quarter Strand project be to develop a proposal to institute a pilot program for teaming at the 7th and 8th grades. This was consistent with their original goals, just way ahead of their timetable. We modified the project for that quarter to accommodate their needs.

They extended an open invitation to teachers to meet and discuss teaming. Laura facilitated the meeting and John provided expertise when necessary. Most of the 7th grade teachers were in attendance and affirmed their support for teaming. A pilot program of "clustering" teachers with shared students was planned for the following year.

Looking back on the year, Laura had this to say, "We can find pride in our achievements... We may get discouraged as to where we are, but being involved with Otterbein, we have found the determination to press on. We can make a difference."

Section Three: Impact of the Middle School Strand on Teachers

The stories of the three middle schools from which I drew the participants for my study set a context for the analysis of data which is rich and complex. Without this context of "what happened" during the year that the teachers were involved in the Institute and the Strand, the reader can understand neither the outcomes nor the themes that emerged from the data.
The initial categorization of data describing the outcomes of the project was not difficult. The guiding questions that had informed my collection of data initially had been refined and reduced to three simple questions. I proceeded to use these questions across the year to organize data from both teachers and administrators: In what ways have the Middle School Institute and the Middle School Strand impacted you? ...your school? ...your school district?

I became so locked into these categories that I mistakenly assumed my data would be divided into these categories. However, I came to understand as I struggled to analyze the data I had collected that it was the impact on teachers that drove everything else that happened. "What happened" in the schools and in the district was just evidence of what had happened to the teachers. The themes that I present, therefore, came after a full year of reflection and working with the data and suggest the impact that the Institute and the Strand had on the teachers who participated in them.

Four themes were suggested in the data:

* Teachers became learners;
* Teachers were challenged to think in new ways;
* Teachers gained confidence and felt empowered;
* Teachers became willing to initiate change and overcome roadblocks.

For each theme, I will describe what teachers reported to me as they experienced the Institute and the Strand and realized that they had voices that needed to be heard, that they had a vision of what their schools could become, and that, indeed, they could play an active role in initiating significant change in their schools.

**Teachers Became Learners**

The most immediate feedback I received from teachers in the study occurred during the Middle School Institute and was consistent throughout the study. The participants were excited about the opportunity to take courses focused on what they do - teach middle school. Few teachers had ever taken a middle school course; all had been
prepared for either elementary school or high school. Yet they were committed to
teaching young adolescents, and through trial and error had generally found successful
ways to do so. They came to the Institute ready to learn, but a little skeptical that they
would learn much that their experience had not already taught them. They were
surprised, even dumbfounded, to find that there was so much more to learn about young
adolescents and middle school philosophy. This awoke a tremendous thirst for
information and knowledge that kept the Design Team hopping to provide resources and
speakers to satisfy them. One of the principals I interviewed a year and a half after the
Institute indicated that his teachers' awakened interest in information about middle level
education continued to impress him throughout the year.

Most of the teachers said that their knowledge about early adolescent
developmental stages had greatly increased, making them more aware of "why" young
adolescents behave the way they do. This led to a perception on their part that they could
be more tolerant of certain behaviors now that they understood them better.

Several teachers indicated the information they had gained helped them to look at
their students in a different light.

This is the most I've ever talked about middle school students as a special group
of people...If I talked to 'experienced' middle school teachers, I'd get the
stereotypical responses about the 'squirrels' and the out-of-control hormones.
This Strand has made me think about my students in a different light, as special
individuals. (T AI, Mar/97)

Many teachers referred to their lack of preparation to work with this age level.
Many teachers admitted they were not trained to be "sensitive to the developmental needs
of middle school students," but rather had been trained to be subject area teachers, or
assumed that was their role in the middle school. As they learned more about how all
types of development seem to be inextricably related, their instincts to care about the
"whole child" were reinforced.

Teaching young adolescents...carries a responsibility that extends far beyond the
mastery of the curriculum...to teach them about life, to help them cope with the
intense changes that they experience as they develop, to assist them in social
skills, and to equip them with the problem-solving and critical thinking skills they
will need to meet the challenges of their future. (T RP3, N/96)

As teachers reflected on their own preparation, or rather lack of it, for middle level teaching, they became quite outspoken about what they should have been taught, and about what future middle school teachers need to know. The presence of undergraduates in the Strand seemed to heighten their awareness of this. They also made frequent references to the need for in-service and professional development for practicing teachers like themselves.

Teachers expressed the opinion that middle school teachers should have more academic specialization than elementary teachers, but broader preparation than secondary teachers. One teacher was very specific about what additional areas of preparation beyond the academic subject areas should be: adolescent psychology, guidance and counseling, mediation strategies, nutrition, biology and medicine related to adolescent development, brain development and multiple intelligences, and cooperative/non-competitive coaching techniques.

During my interview with Mr. B, one of the school principals, he commented:

...opening the door to authentic, middle level education for people who had no formalized training in middle level education was an affirmation of what they have observed in their personal experiences, and they are able to say, 'Oh, my, I need more!' (Mr. B Int, Dec/97)

In sum, the teachers who came to the Institute initially were certainly "ready" to learn, yet they were surprised by how much there was to learn about the development of young adolescents and middle school theory. More importantly, what they had learned from experience "made more sense" in light of knowledge about developmental stages and current research on middle level education that seeks to be responsive to those needs. Their lack of preparation for teaching in the middle school caused them to be eager, "thirsty" learners, and they developed strong opinions about what future middle school teachers should know "from day one." Finally, the teachers' appreciation for the uniqueness of their students and of their own important role in meeting the needs of the "whole" child was underscored. The knowledge the teachers gained throughout the
Strand provided a strong base from which to reflect on their own beliefs and philosophies as well as the current status of practice in their own schools.

**Teachers were Challenged to Think in New Ways**

With an expanded knowledge base about the developmental needs of young adolescents, teachers viewed middle school "theory" with renewed interest. If the characteristics of a "true" middle school were indeed based on the needs of young adolescents, what implications did that have for their own beliefs about middle level education and for the current status of practice in their own schools? The readings from theory and research, the speakers, and the dialogue with peers in the Institute and the Strand classes provided new perspectives from which to view their experience.

One consistent comment from teachers was that the Strand "certainly forced us out of our comfort zones." Their thinking was challenged at every turn and they were asked to articulate what they believed about middle level education. For some this meant that what they were learning and discussing confirmed their philosophy and gave credence to their beliefs. Others, however, discovered that they had not carefully assessed their own belief system and had assumed that the status quo in schools was adequate for young adolescents.

This journey of reflection on personal beliefs and how that aligns with current practice in schools caused many teachers to think seriously about the environment of the entire school beyond the four walls of their own classroom. Teachers spoke of seeing the "big picture" in the school and how the culture of the school filters down through the curriculum into classroom instruction. This metacognitive strategy of thinking about how we think about middle level education brought many teachers to the realization that they had some very strong beliefs about middle level education for young adolescents. Some of these beliefs were played out in how they interacted with students and in how they taught. They were quick to see, however, where the dissonance existed between their beliefs and some practices in their own classrooms and in their schools. It was this
awareness of aspects of their schools needing improvement that led to the development and implementation of the action plans. Throughout the Strand, these beliefs became stronger and were more clearly articulated by teachers, and the evolving strength of these beliefs clearly surprised many of them.

*If somebody had told me after the number of years that I've taught that I was going to take these courses and they were going to totally change me, how I look at my building, how I look at my district, and how I look at my classroom, I would have said, 'Right!' But I have changed.* (DT Int, May/97)

That this change in perspective was obvious to John and me was not surprising, since we talked about these issues weekly in the Strand class, but it was also evident to the principals who were observing these Strand teachers in action in their schools. Mr. S commented in retrospect:

*I think the teachers all benefited from getting a better focus on the middle school child...I think they were all forced to take a look at themselves, their philosophy, their goals, their perceptions, their ability to adapt...I think this has given some teachers an opportunity to see a bigger picture...The Strand is the only variable that I know has changed.* (Mr. S Int, Aug/97)

As teachers became more comfortable talking about their personal beliefs and philosophy about middle level education, they quickly found that other teachers shared their views. I cannot explain why they were so surprised by this. The data suggested that even teachers within the same school had never talked about their beliefs or philosophies with other teachers. The subtle, and not so subtle, competition among the three middle schools perhaps encouraged false conclusions that the teachers had little in common with those from other schools. Perhaps, as the literature suggests, current school structure and culture discourage teachers from having meaningful discussions about education. The discovery of common ground, shared commitment to young adolescents, and similar beliefs brought delight to participating teachers. The structure of the Strand encouraged small group discussion and problem-solving activities that mixed teachers from all three schools. This facilitated the sense of community-building and bonding that teachers spoke about in their reflection papers. They expressed a new identity as a group of committed middle level educators that surpassed their usual identity as teachers at a
particular school. They began talking about what could be done to facilitate communication among the three buildings, and what could be done to advocate for young adolescents district-wide.

In sum, the data suggested that teachers had reexamined their most fundamental beliefs about middle level education based on both their experience and the knowledge they had gained from the Strand. This caused them to view "how business is done" in their classrooms and in their schools in a more holistic way, as part of an entire culture that can either support or inhibit the healthy development of young adolescents. In some ways their beliefs were validated and strengthened by this reflective process. In other ways, the new perspectives through which they viewed their schools helped them identify parts of the school culture that were antithetical to young adolescent development. In many respects, teachers felt they had been encouraged to think outside of their "comfort zones." While this process was not always pleasant, it resulted in the formulation of some strongly articulated beliefs about what middle schools should "look like." This awareness of, and sharing of, a personal belief system led to an evolving sense of a shared vision for middle level education with other teachers in the Strand that transcended building loyalties and bonded Strand teachers together in their commitment to improving all Meadow Park middle schools. The energy that this process created had a dramatic impact on how teachers came to view their role in their schools and in the district.

**Teachers Gained Confidence and Felt Empowered**

Throughout the year, teachers talked about feeling more confident. This confidence was exhibited in several ways. Many teachers felt more confident interacting with students because they felt more knowledgeable about their students' needs. Experience had taught them "how" young adolescents behave, but information from the Strand had helped them understand "why" their students behaved the ways they did, and what appropriate ways to respond might be.

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This confidence extended to interactions with parents, student participants, and student teachers. Knowledge gained from the Strand had confirmed what they knew from experience or provided additional understandings of young adolescents and middle school philosophy, and this allowed teachers to feel more articulate in discussing students and school issues.

Confidence, sometimes referred to as excitement, energy, commitment, or renewal by teachers, can be used to defend what one is already doing. In this case, the confidence described by teachers could be better described as a sense of efficacy, that hard-to-explain feeling that one can do something new, that one can indeed make a difference.

Several teachers during the year insisted that they felt empowered. This growing sense of empowerment seemed to be a result of the affirmation teachers felt from the Strand, the generally positive response from teachers and administrators in their buildings, and the sense of success in spite of roadblocks that teachers were experiencing as they implemented their action plans. One teacher put it this way, "(The Strand) gave us the power to do what we needed to do because we knew that research supported our ideas and there were others whose philosophies were the same." (DT Int, May/97)

Determination seemed to follow confidence, efficacy, and empowerment; with determination came the sense of personal responsibility.

_I think (the Strand) really changed my sense of responsibility. My expectations of myself have been broadened because now I know I can do more. I know I can be a more effective communicator and you might not be able to tackle the world alone, but the more you educate others in your field and help each other along, you can (have an) impact...to sit back and do nothing is not being responsible in my eyes. My vision of that has greatly changed._ (DT Int, May/97)

In an interview with Mr. R (Oct/97), principal of Westgate Middle School, he described his view of how that empowerment had taken place. Part of it, in his opinion, was the affirmation that middle school teachers are important, that what they do is important. By being part of the Strand, they were making a physical statement that they wanted to learn more about or have reaffirmed what they knew about middle school
kids..."and then to say how could you do more things right? or how could you even make a greater impact?...feeling that...gave them the confidence to step forward and do it."

In sum, a transformation had taken place during the first half of the year. Teachers who were already fairly confident in what they did in their classrooms and schools found themselves developing confidence to do that which was different, challenging, and a bit risky personally and professionally. They were motivated by the collective strength of peers in the Strand, validation of research and professional literature, and the increased clarity with which they came to view their roles as educators. Confidence, bolstered by a sense of efficacy and determination, had empowered them to view themselves in a new way, as having the potential to initiate change.

**Teachers Became Willing to Initiate Change and Overcome Roadblocks**

Data from teachers and administrators as well as my personal observations suggested that teachers in the Strand were not just "talking the talk," but they were also "walking the walk." They not only wanted to be advocates for young adolescents in their schools, they exemplified the confidence and determination grounded in their beliefs about middle level education to be the initiators of change.

The action plans provided the first opportunity to do this, and even with administrator backing, it was no small thing for nine or ten Institute teachers to present their action plans in front of 50 to 60 staff members who had no investment in the project whatsoever. They were scared, nervous, unsure of the response they would receive, but they were willing and eager to give it a try.

As the action plans were implemented during the year, it was not just the teachers continuing in the Strand who remained active with the projects. The Institute teachers who did not take the Strand continued to identify themselves with the action plan and with the remaining Strand teachers. The bond created during the Institute held throughout the year and provided ongoing collective strength for Strand teachers in their willingness to initiate change.
For these teachers, "crossing the line" from inaction to action meant speaking out in their schools, overcoming roadblocks as they appeared, changing teaching strategies, and providing leadership for projects. Design Team teachers particularly felt the burden and risk of this leadership role, more than they had anticipated.

**Speaking Out**

One identifiable change was the willingness of Strand teachers to speak out in their schools more than before. Some teachers reasoned that they did not feel as if they were standing alone anymore. Much of what they believed had been affirmed or clarified by research and colleagues in the Strand, making it easier back at the building to question things and to ask "what is best for kids?"

One teacher spoke about feeling the "right" to disagree with more experienced teachers who she had come to realize were not all middle level education "experts."

She had previously been satisfied to "do her own thing," but was no longer satisfied to sit quietly and do nothing. This is what she said:

*This Strand has helped me see that not all experienced teachers are middle school education experts... I have the right to feel differently than they do. I've never been a follower, but unless I feel 'strongly' about something, I have tended to do my own thing and not communicate my feelings to others... I am beginning to see that when communication doesn't occur and we all do our own thing, we are educating in isolation...(and it doesn't have) the same impact as working together to become a developmentally responsive middle school. The silent majority (previously inclusive of myself) need to take a stand for what we believe in!* (DT Jour, Mar/97 and DT Int, May/97)

The principals confirmed this willingness on the part of Strand teachers to speak out. One noted that at faculty meetings during the discussion of controversial issues, teachers who had once sat back passively were now willing to stand up and suggest an alternative perspective - what is best for kids, not just what teachers prefer. They reported this as a dramatic change in the behaviors of some teachers. Another principal observed:

*One key part was the fact that we had ten people involved, many of whom had never talked to the entire staff before, and that's some pretty powerful stuff when... all of a sudden someone is speaking with some spark and emotion in her voice about what the needs are...* (Mr. R Int, Oct/97)

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Overcoming Roadblocks

Progress did not occur without the reality of roadblocks to change. Teachers had predicted many of those roadblocks in the Middle School Institute as they were developing their action plans. Experiencing them first-hand was discouraging and demoralizing.

Roadblocks included staff resistance to change. Teachers were afraid to leave their "comfort zones" and were not always willing to do the amount of work and planning that change would require.

Some of the realities of life in the Meadow Park schools made some changes difficult and less than welcome. The overcrowding of all three middle schools contributed to the staff feeling overworked, and the morale was low. Organizational structures like a lack of common planning time for teams limited teachers' ability to physically meet together and plan.

Philosophical differences presented themselves among staffs. Some staff members were still battling the conflict between separate subject curriculum and an integrated curriculum. Even those who felt a need for change, and believed in the middle school "concept," struggled with the same issues that had affected their flexibility in the past. Some were at odds over the issue of teaming in the 7th and 8th grades.

Philosophical differences also were evident whenever the subject of proficiency testing arose. "We feel interdisciplinary units might be a great idea, yet we worry if every objective in our individual curriculum will be met before the testing date."

Changing Teaching

The spring quarter Strand class focused on instructional strategies and assessment, grouping options, and cognitive theory related to multiple intelligences and learning styles. Teachers and undergraduates in the Strand were paired up to create and implement instructional projects in the classrooms of the teachers. They were to incorporate any of the teaching strategies we had examined and modeled during the
Strand that were research-based and appropriate for the developmental stage of young adolescents. As with school-wide initiatives, teachers found that it is easier to espouse beliefs than to follow through and make changes in instruction that are consistent with those beliefs. However, after nine months of wrestling with what they really knew and believed about young adolescents, teachers had to confront dissonance between what they said they believed and what actually happened in their classrooms. Many of the teachers struggled with initiating change in their own classrooms much more than they had with changing things in their schools that did not affect instruction in their classrooms. The cumulative impact of the Strand seemed to motivate them to try strategies beyond their "comfort zone."

Citing additional knowledge about young adolescent development, teachers tried more group work and intentionally attempted lessons that would appeal to different learning styles and multiple intelligences. Teachers who had never done any interdisciplinary activities before attempted some major projects with other teachers. Some tried to find more ways to get the students active and creative, to use alternative assessment and student self-assessment. Following a discussion in the Strand about the physical development of young adolescents, one teacher allowed her students to do more activities standing or sprawled out on the floor when they asked to do so, and found that their productivity and time on task increased. Classroom control was not sacrificed.

The structure of the instructional projects gave teachers something concrete to attempt in the way of initiating change in their classrooms. They supported one another, and challenged one another. An interesting factor in the success of these projects was reported to be the pre-service teachers who were paired with the teachers. While the teachers provided them with support working in the classroom setting, pre-service teachers in most cases played an important role in the development and implementation of the instructional project. Their relative lack of fear in trying something new motivated and encouraged teachers to try strategies that they had been hesitant to try on their own.
Teacher/pre-service teams worked closely together and experienced the euphoria of success when their pupils responded with enthusiasm to the projects. The Strand had finally broached the last barricade to change, the walls of the classroom.

Assuming Leadership Roles

Along with a new willingness to speak out before peers in their schools, overcome roadblocks, and change teaching strategies, teachers exhibited a willingness to assume formal and informal leadership roles. For some teachers, this was not new; they had been known as "leaders" in some respects before. For others this was new behavior that was reported by both teachers and principals. The action plans provided many opportunities for leadership within the schools, but these leadership roles continued throughout the year even after the initial action plan had been implemented. One principal, in speaking of the leadership the Strand teachers provided in the building, put it this way:

They were the key part of planning our Spirit Day and they came up with the anagram W.O.W. - Wild on Westgate. And that was kind of used throughout the course of the year in planning activities. Not just those activities that were specifically a product of the Institute but anything that bettered the school...They continued to meet monthly to talk - plus it was always open so that as new people got interested they could be pulled in...at least we've got a core of people who are starting to say we've got to make the...system fit the kids. not the kids fit the system. (Mr. R Int, Oct/97)

The Design Team teachers especially reported the effects of being "thrown into" these leadership roles. While they had committed to taking leadership for co-developing the Strand with John and me, they did not anticipate the level to which they were ultimately expected to assume leadership in their buildings. By default the Design Team teacher in each building began to be looked to by teachers and the principals as the "liaison" with Strand teachers: communication was channeled through the Design Team teachers, and the principals relied heavily on their leadership during the implementation of the action plans and beyond, as spin-off activities developed. Nealy described her experience like this:

I am relatively new to my building...Most of the people in my building opened it and it 'belongs' to them...It was really rewarding to me because I felt so very accepted after presenting our action plan to my building. All of a sudden I
became the expert on (student-led conferences) that I had just become aware of and researched... I don't feel like I can change things totally myself but, boy, with the support of some other people with shared visions, I can really do it. Someone has to take the lead and I guess by being on the Design Team I was put into that position, but now I kind of like being in that position... It's just made me feel more professional. Even (reading) the journal, the research, I would never have done any of that. I would have been satisfied to stay within my four walls and teach math... but it goes so far beyond that. (DT Int, May/97)

Kris reported that the leadership role into which she was thrust was sometimes very uncomfortable. She received many negative comments about their action plan to have cross-grade-level homerooms, and she got some "nasty" notes from some colleagues. With the support of the Strand teachers and her administrators, she was able to keep going. The most difficult moment for her came right before semester break, when an outspoken teacher who did not like cross-grade-level homerooms asked in a staff meeting that they not be continued because "we know we don't like them." She reported how quiet the room got, and she didn't know what to do. She looked around to see if any Strand teachers would give her any support, but their downcast eyes told her she was on her own. Desperate to not let the whole project fail, she suggested staff and student surveys to find out everyone's true opinion about it. Both staff and student surveys were overwhelmingly positive, indicating how fearful her "supportive" colleagues were of speaking publicly in opposition to the veteran teacher who had strongly suggested that the cross-grade-level homerooms be changed back to the traditional configuration. After that "turning point," Kris realized how very fragile teachers' confidence to initiate change and stand by it can be. She also had new appreciation for the professional risk she had taken to be so visible as a teacher leader in the building.

Laura also described her surprise at being "thrown into" leadership roles in her building that she would not have normally taken, but with the backing of peers in the Strand and colleagues with whom she teaches, she had felt confident to take these roles. She reported times of incredible frustration and sometimes asked herself, "Why should I do this?"
Her awareness of loneliness and the risk of initiating change was at no time greater than in February, when at the urging of fellow Strand teachers, she stood before the Board of Education and encouraged them to make changes in the architectural design of the new middle school to facilitate teaming, and to create a task force to review middle level programs in all three existing buildings to move the entire district forward in the implementation of the middle school concept. She had been advised by her principal not to "go public" and speak before the Board, and was questioned by another principal about her intent as she entered the Board's meeting room. John and I had been asked by the Strand teachers to speak to the Board in support of Laura's recommendations, and we did so. Our motives were also questioned privately by administrators and the Superintendent, we later discovered.

Whatever district politics were playing out, Laura spoke out for young adolescents and the schools they should have, and she was supported by many Strand teachers who were present that night. While the Board was very polite, they indicated that it was too late to make any changes to the building. However, the very next morning the architect met with the Superintendent and the three middle school principals to go over changes in the plans which would make teaming possible throughout the building. A few months later, the Board appointed a Middle School Program Review Committee made up of teachers, administrators, and parents to review the programs and the future direction of all of Meadow Park's middle schools. Laura learned how it feels to stand up for what you believe, and all of the Strand teachers felt it was a victory for middle level education in Meadow Park.

When I asked Laura to reflect on her leadership role during the Strand, she had this to say, "These are my beliefs, and I just can't turn my back on them...I wouldn't change (this experience) and I wouldn't trade it for the world, but it was not easy...It was life-changing."
In sum, the data revealed more than "what happened" outwardly in the middle schools as a result of the Middle School Institute and Strand. The visible outcomes of the year, as impressive as they were, were just evidence of the transformation of a group of teachers from passive participants in their schools to active participants willing to take risks and provide leadership for change. My understanding of this transformation was rather slow in coming, because it was so exciting to witness the implementation of the action plans and other projects that developed as a result of the action plans. I knew intuitively that something was happening to the teachers based on what they were revealing in their reflection papers and journals. However, it was not until the follow-up interviews with the Design Team teachers and their principals that I realized the extent to which the Strand had impacted the teachers themselves.

When I had initially asked the question, "What are teachers' perceptions of the impact of a professional development program for middle school teachers?" I assumed the answer would include descriptions of changes that would make their schools more responsive to the needs of young adolescents. I had been focusing on the physical evidence of change in the schools, while the drama was going on within the teachers.

The data revealed teachers' perceptions of change not only in their schools, but also within themselves. The story that these teachers wanted me to tell, therefore, had several layers. Initially, they wanted me to know who they were and what they cared about. They wanted me to know how powerful the Middle School Institute was in terms of creating a community of knowledgeable middle level advocates who believed they shared a philosophy and a vision of what middle schools could be. They wanted me to feel their anxiety and excitement about their action plans, and the resulting feeling of satisfaction when they succeeded. Finally, however, they wanted to state that they had changed as a result of the whole experience. As they reflected on the year, they recognized the transformation within themselves and their colleagues. They said they would never be the same.
Conclusions

The Middle School Institute and the Middle School Strand brought about change in twenty-eight teachers in the Meadow Park School District by providing a context and impetus for:

* Personal and professional growth;
* Development of a new "culture" of advocates for young adolescents;
* Teacher-initiated change in schools that impacted over 3200 students and teachers.

Personal and professional growth resulted from teachers grappling with information gleaned from professional literature and research and from middle level "experts" including young adolescents, parents, legislators, Board of Education members, administrators, course instructors, and their own colleagues. As learners, they could reflect on new information from the wisdom of their own experience as well as from the perspectives of others and make sense of it in their own way. They could examine and redefine their personal beliefs about middle level education until they were able to articulate and defend them.

This personal and professional growth led to increased confidence in the validity of their own experience, increased commitment to young adolescents, excitement about their role as middle school teachers, and an unstinting belief that they could make a difference in their own schools. This resulting sense of efficacy gave them the will to act.

The Institute and the Strand also provided a context and impetus for the development of a new "culture" of advocates for young adolescents. This was an unanticipated outcome of the experience. While I expected the teachers to enjoy meeting each other and sharing ideas, I did not predict the strong ties that came to bind these teachers together. Representing different grade levels, diverse subject areas, and three middle schools, teachers came to the Institute assuming that all they had in common with these other people was that they happened to teach in a middle school. They were
surprised and delighted to find comrades, friends with whom they shared beliefs and visions for middle level education. This almost-immediate bond was strengthened throughout the year, as they continued to take courses in the Strand. Even teachers who could not take the rest of the Strand remained active with Strand teachers after the Institute. They shared responsibilities and provided support for the implementation of the action plans and other projects that were initiated by Strand teachers.

Teachers spoke of the shared vision and common goals that epitomized this community of teachers, and how this provided for communication and support among all three middle schools for the first time. This "culture" of advocates for young adolescents was reported by teachers to transcend the individual school cultures of which they were a part. In fact, teachers who were dreading the reassignment that would result when the new middle school opened said that now they could rest assured that there would be Strand teachers in all of the buildings. "Somebody" would be in each building who would share their commitment and beliefs about middle schools.

I believe the emphasis on the importance of this new "culture" was an expression of the isolation these teachers had experienced in their buildings. Not only did they feel alone, but they wrongly assumed that no one else held the same beliefs they did. Furthermore, they never had had the opportunity to talk about these important issues with their colleagues. The discovery of a group of people who shared their beliefs was enlightening and empowering, and they sensed a collective strength. Not only did they have the will to act, but they also came to believe that they could act and that they could make a difference. All they needed was the structure to facilitate change.

Finally, teacher-initiated change in the middle schools of Meadow Park came about as a result of the development of action plans that originated during the Middle School Institute. Personal and professional growth was in gear, a community of teachers who desired a new "culture" was forming, and teachers from the same schools were arguing, debating, and listening to each other to identify an aspect of their schools that
should be improved to better meet the needs of young adolescents. Their task seemed straightforward - to develop an action plan for their school that would reflect middle school theory grounded in research.

The intensity of the discussions surprised us. The action plans surprised us even more. They were all school-wide, very ambitious, and would obviously require the approval of the principal and the participation of the entire staff of each building. It is difficult to describe the feeling of oh-my-God-what-have-we-done when my teaching partner and I for a moment doubted ourselves and the teachers as we listened to their action plans. How could they possibly pull this off? Had we set them up for failure?

I have already reported in this chapter the enthusiasm of the principals when the teachers presented their action plans on the last day of the Institute, and I have also reported the struggles and ultimate success of these projects in the schools. As I watched these teachers implement their plans and overcome one hurdle at a time, I saw evidence of personal and professional growth throughout the year. I saw teachers speaking out in their buildings, and providing leadership for change when there had been none.

I saw teachers from the Strand struggling to support one another when the going got really rough and "the opposition" turned out to be their friends. I heard from their principals how dramatic the change in several of the teachers, and how the action plans had a significant impact on the life of the school. I developed a new respect and admiration for teachers who are willing to take risks by standing up for what they believe.

In conclusion, teachers participating in the Middle School Institute and Strand grew personally and professionally within a context that encouraged new learning and an examination of personal beliefs. Once they could articulate what they believed, they found that they were not alone. This creation of a "culture" separate from their school culture somehow gave them the ability to view that school culture from new perspectives. When they determined that what they wanted in middle level education was not what they had in their schools, there was much frustration. Who would fix all these problems?
The most dramatic outcome of this study was the realization by teachers that "no one else" was going to fix things. The district had made promises it had not kept. The principals were stymied by both directives from the central office and by resistance among the teachers. The teachers realized that "they" had to initiate the change or it just would not happen. The Institute and the Strand gave them the confidence and "ammunition" to believe that they could make their schools move one step closer to being what they wanted middle level education to be. And they decided to go for it.
CHAPTER 5
CONCLUSIONS, IMPLICATIONS,
AND QUESTIONS FOR FURTHER STUDY

Any new insight which suggested an answer led me to many new questions, which remained unanswered.

Henri Nouwen, 1972

Revisiting the Question

This study initially sought to answer the question, “What are teachers’ perceptions of the impact of a professional development program for middle level educators on their personal beliefs and practices?” The question proved to be too limiting for the outcomes of the study. In actuality, this question was gradually refined and expanded by other questions that emerged from the data:

* What impact did the Middle School Institute and Strand have on teachers’ personal and professional growth?
* What impact did the Middle School Institute and Strand have on teachers’ schools?
* What impact did the Middle School Institute and Strand have on their district?

These questions provided a framework for collecting data and enabled me to articulate a revised primary research question that the data supported: "How does teacher empowerment to initiate change result from a professional development program for middle school teachers co-developed by teachers and college faculty?"

As I have noted elsewhere in this paper, I underestimated how the intensity and desire of these teachers to be change agents in their own schools would develop across the year. Documenting what had happened in the schools was not difficult. What was much more complex and challenging, however, was trying to piece together what had inspired it,
what dynamic set of circumstances, personalities, and intentions had resulted in this unique experience. What might that mean for other professional development programs?

General Conclusions

The overall findings of this study revealed the dynamics and circumstances that led a group of twenty-eight teachers in three middle schools to believe they could be initiators of change. The study tells the story of what happened in their schools and suggests what teachers perceived to be the impetus for those changes: the clarification of teacher beliefs, growing awareness of the discrepancies between the reality of their own schools and a true middle school, the finding of a community of teachers who shared a vision of what middle school should be, the realization that they could be change agents, and the growth of confidence in their ability to do so.

What Has Happened Since the Study

There is sufficient residual evidence to state that the Middle School Institute and Strand have had a lasting impact on the Meadow Park middle schools. The primary components of the action plans at Union Middle School and Valley Middle School have been institutionalized and are part of the schools’ respective cultures.

At Union Middle School, 100% of the staff is now participating in student-led conferences. Teachers report that students are quite proud of their ability to explain the curriculum to their parents and to feel accountable for their achievement. Students appear to be much more aware of what they have accomplished and where their weaknesses lie because they must explain it all to their parents. Interestingly, teachers report that helping prepare students for their conferences helps them articulate better to students what their objectives really are. The principal indicates that the change has had a positive impact on teachers’ and parents’ attitudes regarding conferences, and this has affected the whole climate of the school.

When I talked with a participating teacher from Union two years after the Institute, she immediately brought up the success of the student-led conferences. She related that as
school began this year, she had parents already asking about the conferences. She reported that last year she had 96% of her 8th graders' parents come in for conferences, in her words, "unheard of attendance for middle school conferences."

At Valley Middle School, the cross-grade-level homerooms are the norm now, with 6th, 7th, and 8th graders mixed. Teachers report that there are more friendly relationships among students of different grade levels, evidenced in part by the more frequent attendance of 6th graders at school and sporting events. The principal has noted a decrease in "hallway incidents" between 6th graders and upperclassmen, and a corresponding decrease in parent complaints about their 6th graders getting picked on. The move to plan more interpersonal activities has resulted in a school-wide field day and some getting-acquainted activities in homerooms that impact the general feeling of belonging and comfort for all students.

As I was talking with a new parent in the community and we were exchanging pleasantries about her 6th grader and 8th grader who are starting school at Valley, she mentioned they were in the same homeroom. I started to say that it must be a mistake and she should tell the principal. I suddenly realized that they were in a cross-grade-level homeroom, initiated by Strand teachers. She went on to say that she was so relieved they would be able to look out for each other during the first weeks of school. The Strand initiatives made a difference for this family. We may never have more than a superficial understanding of the impact these initiatives will continue to have on young adolescents and their families.

The opening of the new middle school has had a major impact on Westgate. The principal there has been moved to the new school and has taken almost a third of the staff with him, including Laura, our Design Team teacher. It remains to be seen what will happen at Westgate and the new middle school with this new configuration of staff.

Another residual effect of the Strand that is potentially significant for future pre-service teachers is the presence of a cadre of teachers in these four middle schools who will
provide a depth of field experience for Otterbein students that they have not had previously. These teachers know middle school philosophy; they have read the research the pre-service teachers will be reading; they have themselves struggled with the discrepancies between personal beliefs and practice. They have planned and team taught instructional units with pre-service teachers, learning shoulder to shoulder with them. I predict that they will receive our future students with very different attitudes than those I observe in some cooperating teachers, who are sometimes suspicious of what PSTs are learning at the "university."

There are Strand teachers in every middle school in Meadow Park. Are there enough of them to make an ongoing difference? Will the bonds that initially drew them together be worn thin as building loyalties once again break down communication among buildings? I do not know. Without a structure that provides access to new information and research, facilitates support from like-minded colleagues, and encourages bold initiatives, perhaps they will go back to "business as usual." However, there is sufficient evidence from this study to make me believe that the teachers who went through the Strand will make a difference wherever they are.

Implications of this Study

Qualitative studies are not designed to be used to generalize conclusions to other situations or contexts. They are intended to illuminate and interpret the perceptions of the participants in one particular situation. This study was no exception. Its conclusions cannot be generalized to another population of teachers in different circumstances. However, there are implications in this study that can provide a new perspective for teachers and teacher educators as they consider their respective roles in educational change, specifically middle school reform.

The model of this professional development program for practicing middle school teachers can provide insight and guidance to educators frustrated and tired of waiting for someone else to initiate reform. Built on grounded theory that emerged from this study,
this model provides encouragement for the professional development of middle school teachers and for the preparation of future teachers.

In this section, I will describe the major components of the model for the professional development of middle school teachers that emerged from this study. I will then discuss implications this model has for professional development, teachers, and higher education. Finally, I will propose questions for further study suggested by my research and discuss the implications of my study in the broader context of middle school reform.

A Model for Professional Development of Middle School Teachers

* A Design Team:
Teachers and college faculty planned, implemented, and assessed the program throughout.

* A developmental sequence of courses:
The curriculum of the Middle School Institute and Strand was based on the developmental needs and social context of young adolescents and the latest professional literature and research informing middle school reform in the areas of school environment and organizational structures, teacher characteristics, integrated curriculum, teaming, instructional strategies, assessment, and grouping.

* The inclusion of both practicing and pre-service teachers in purposeful interactions:
Teachers served as mentors for pre-service teachers and sometimes provided field sites, but they did not have an evaluative function, i.e., they did not give grades, just formative feedback. Cohort groups were used in class to assure the interaction of practicing and pre-service teachers in small group discussions. Community-building activities throughout the Institute and Strand facilitated the development of trust and camaraderie among teachers from different buildings and between practicing and pre-service teachers.

* Shared readings; differentiated assignments:
Readings were shared in common; assignments, however, were differentiated
for practicing and pre-service teachers. Pre-service teachers had assignments dealing primarily with their field experiences and led to reflection on the status of middle school concept implementation. Practicing teachers had assignments that promoted reflection on personal beliefs and current practices in their schools and encouraged the development of plans to improve their schools or classrooms. Time was provided in class for teachers to develop these plans, and pre-service teachers were able to contribute their observations from other school districts. Everyone had something to contribute.

* Unifying themes/questions providing a foundation for inquiry in the Institute and the Strand:

1. What do I need to know about early adolescent development and recent theory and research concerning middle level education?
2. What do I believe about middle level education that is appropriate for young adolescents?
3. What is the current status of the middle school?
4. What can I do to initiate change in my school? What do I need to know about the change process to inform my decisions?

Other Implications for Professional Development

* Off-site professional development has advantages. This contradicts much of the professional literature that seems to denigrate off-site professional development. The teachers in this study were from three different middle schools in the same district. They reported that their schools were very competitive and that they did not know teachers from the other schools. They came to believe through their experience in the Institute and the Strand that a "neutral" site had many advantages. The ongoing nature of the Strand over the year was essential to building a "culture" of advocates for young adolescents separate from individual school cultures. This provided needed support and accountability as the teachers implemented action-
oriented plans in their schools and ran into roadblocks.

* Professional developmental can lead to personal transformation resulting from reflection on personal beliefs and practice in light of current professional literature and research.

**Implications for the Role of Teachers**

* Co-developing professional development with college faculty assures teacher input and the opportunity to “step outside” of one’s personal perspectives.

* Teachers do not have to wait for others to initiate change; they can provide leadership for initiating changes based on acquired knowledge of young adolescents, current theory, research, and practice, and awareness of change process.

**Implications for Higher Education**

* Seek out teachers and provide opportunities to co-develop courses that challenge teachers to critically reflect on personal beliefs and the current status of middle schools.

* Do not label teachers. The term “master” teacher connotes having all the knowledge and skills one needs. However, all of us need to claim our ongoing role as learners based on two premises: we never know everything; and none of us is as smart as all of us.

* Focus teacher energy in courses on the development of action plans that can impact young adolescents rather than writing papers. These action plans should be research-based and responsive to the needs of young adolescents.

* Engage teachers in the study of the change process, so they can anticipate roadblocks, involve and inform colleagues, and respect the need for personal transformation before meaningful change can occur.

**Questions for Further Study**

From my research emerged two questions for further study: (1) What will be the
ongoing impact of the Institute and the Strand on the teachers who participated and on their schools? and (2) What is the impact of having pre-service teachers in courses with practicing teachers?

**Ongoing Impact of the Middle School Institute and Strand**

To determine the ongoing impact of the Institute and Strand a year and a half after its conclusion, I sent out questionnaires to all participants requesting their opinions about the residual impact of the Institute and Strand on them and on their schools. I also asked if they would like to serve as mentors to pre-service teachers in the Strand this year. I am just beginning to get responses, but they are positive. Several teachers have agreed to be mentors; several teachers reminisced about how meaningful the experience continues to be to them. Three of the Strand teachers from Union have been asked to present their action plan on student-led conferencing to the staff of the new middle school. Other teachers I was able to speak with mentioned that they were attempting new teaming configurations that they hoped would lead to more widespread implementation of teaming in the middle schools. One of the Design Team teachers said in her note that rereading the transcript of her interview was a good reminder of what “our goals” continue to be.

Informal conversations with teachers who participated in the Institute and the Strand led me to believe that the experience changed them, that they will never look at their schools and their role as teachers in the same way. Specifically, now that they have caught a glimpse of "the big picture" of middle level reform and the very real part that they can play in it, they have lost their innocence, so to speak. It will be harder to withdraw within their own four walls when they have been a part of a community of middle level advocates. I am eager to document what happens in the Meadow Park middle schools as these teachers continue to make a difference.

**Impact of Pre-service Teachers and Teachers Learning Together**

The presence of pre-service teachers in the Strand had a powerful impact on the year. Teachers understood that they were supposed to mentor these PSTs, but they were
not exactly sure what that meant. Therefore, we structured interactions in class between teachers and PSTs by putting them in mixed cohorts, so that every small group discussion had teacher and PST input. PSTs visited the teachers' schools in the fall, and then they were assigned to a specific teacher for their spring field experience. After a year of being in class together, reading the same literature, articulating beliefs, and learning about developmentally appropriate instructional strategies for the classroom, they had to design an instructional project together that would reflect some of these strategies. As I have reported earlier, the relationship between the teachers and the PSTs was no longer mentor-mentee. They were partners on the same team. Sometimes the teacher provided support for the PST in the classroom setting. Often, however, it was the PST who pushed the teacher to try things outside of her usual "comfort zone." One teacher exclaimed, "I would never have tried a Hyperstudio project with my students if it had not been for Becky!" A crucial aspect of this relationship building, in addition to the commonality of taking the same courses together, was that the mentor teacher was not evaluating the PST. They were, indeed, learning together and their mutual responsibility was to their students; their mutual accountability was to the other participants in the Strand.

Likewise, this experience in the Strand had a significant impact on the PSTs. All of them expressed a concern that they might not find jobs in true middle schools, that we had "spoiled them" for the real world. They concluded that no matter where they got jobs, they would work for middle school reform. Whether or not they will, this attitude of determination to initiate change I observed in our PSTs is something I have not observed in other teacher education classes. The teachers in the Strand clearly noticed it, and they would frequently comment how fortunate the schools that hired these enthusiastic, well prepared young people would be. One teacher commented, "It has taken me twenty years to learn all that these PSTs have learned about middle level education in one year." What the teachers did not realize was that they had successfully mentored the PSTs by showing them how to initiate educational change based on a strong belief system, theory grounded
in research and informed by practice, and the collective strength of colleagues who share the same vision.

The study revealed other unanticipated benefits for pre-service teachers and practicing teachers when they were allowed to learn together and from one another in a mentoring relationship rather than an evaluative one. I believe that the pre-service teachers learned a great deal listening to teachers "think aloud" as they clarified their personal beliefs and struggled with the dissonance between beliefs and practice. They saw first-hand that teachers, even experienced ones, do not have all the answers but they are committed to exploring the questions and searching for the answers. Most importantly, pre-service teachers were given an intimate view of the "agony and ecstasy" of teacher-initiated change in the middle school. This experience provided teacher-role models that pre-service teachers rarely see, i.e., they saw teachers assuming responsibility and leadership for change. I have come to believe that this experience will forever change the way these new teachers view themselves in terms of their capacity to impact their own schools in the future because they have seen other teachers do it.

I believe that the presence of pre-service teachers had a positive impact on both their preparation as middle level teachers and on the experienced teachers with whom they worked. It was one of the unexpected surprises of the Middle School Strand. Further study of this phenomenon is necessary.

**Final Thoughts and Implications for Middle School Reform**

This model presents middle school teachers and teacher educators with a serious challenge. Do we wait around for roadblocks to go away? Do we wait for someone else to initiate change for us? Do we reinforce the status quo and in subtle ways undermine reform in the middle school or do we act boldly on the basis of our belief that young adolescents want and need schools that are responsive to their needs? For over thirty years, middle level educators have proposed the theory that early adolescence is a unique age, fraught with social and emotional land mines. Middle schools organized on the assumption that
young adolescents will figure it all out on their own are failing the students they serve. Increasing evidence from research documents improved climate, achievement, and social adjustment as middle school concept is implemented.

I have come to believe that the key to reform is teacher-initiated change. In order to initiate meaningful change, teachers must be informed beyond their own practice and they must be willing to be leaders of that change. I believe higher education can provide a catalyst, an opportunity for teachers to help develop their own professional development based on the needs they see in their schools. This partnership can be mutually energizing and responsive and it can lead to personal transformation and the building of a community of advocates for young adolescents. In addition, teachers can be powerful role models for pre-service teachers. This takes teachers off the pedestal to sit beside them in class and struggle to articulate beliefs and argue theory and practice. Pre-service teachers participate in the discussions that lead to the development of action plans for improving real schools, and they see teachers taking personal and professional risks to initiate those changes and overcome roadblocks. They see themselves in a few years, doing the same thing. If these teachers can initiate change, then so can they.

In a larger context, this study has implications for middle school reform:

* The top-down approach has not worked; either those in authority have not sufficiently implemented the middle school concept or they have mandated changes without appropriate training and support for teachers.

* Teachers must elicit the support of colleges and universities in developing professional development that will support teacher-initiated change grounded in theory, research, and best practice.

* Teachers must initiate change and pursue the implementation of middle school concept in its entirety, providing leadership when necessary.

* Informed teachers must defend the middle school concept where it already exists and be willing to speak out if aspects of it, like teaming or common planning
Unless teachers and teacher educators take seriously their role in initiating positive change in our middle schools, and stop waiting for someone else to do our job, we will have failed the young adolescents who are trying to make sense of this complex world. If we do not take advantage of this "window of opportunity" (Scales, 1992) to improve middle grades education, the educational opportunities and welfare of millions of young adolescents will hang in the balance. These youth need and deserve developmentally responsive schools staffed with knowledgeable and capable teachers who are experts at their profession (McEwin and Dickinson, 1995). Their futures, and ours, depend on it.


Shanker, A. (1993). 92 hours. The Developer, (September)


Toepfer, C. (1978). In-service needs in the middle grades. Dissemination Services on the Middle Grades, November 11, 3.


